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Subjunctive Bordering.

Governing the future at the EUropean border.

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1. Introduction

"The best way to predict the future – is to create it" (Frontex, 2011)

In 2011, Frontex brought the future into being. This took the relatively unspectacular form of publishing a '*Forward Study of European Border Checks*' (Frontex, 2011). Commissioned by Frontex, in this study consultants from Liron Systems Ltd. as well as academic researchers from the University of Southampton, UK, and the University of Ben Gurion, Israel, imagined different future scenarios relevant to EU border management on the grounds of what they perceived to be the status quo. While some of their scenarios – most notably the 'Wild Card' of uprisings in the Middle East – proofed to be surprisingly close to the 'real future' that eventually unfolded, the study understood itself more as an exercise in "triggering interest among practitioners and managers alike, to think about the future and futures risks and research them further" (Frontex, 2011: 95) than in prediction. The study offers a decidedly extravagant gaze on the border, confronting an unknowable future through imaginative capacities.

Moving forward in time to the year 2018, and heading 982 km up north geographically, from the Frontex headquarters on Plac Europejski 6 in Warsaw, Poland to the 'Swissôtel' on Tornimäe 3 in Tallinn, Estonia, a conference hosted by eu-LISA (European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice) discusses how – and if for that matter – the EU border will be '*Getting Smarter Through Technology*' (eu-LISA, 2018). After half an hour has passed with a welcome coffee and registration matters and once the directors of eu-LISA and Frontex, Mr. Garkov and Mr. Leggeri, have delivered their keynote addresses, a panel discussing the 'Future of information driven integrated border management' is scheduled from 10am to 11am. According to the official conference report, a major concern in this first discussion were the implications of the 'new' knowledge promised through the interoperability of a range of already existing or emerging databases within the European Union (eu-LISA, 2018: 16ff). In contrast to the 2011 study, the future here emerges through ever more nuanced forms of risk analysis.

What do these glimpses into the everyday universe of border security professionals tell us? A first observation would be that a number of different actors are involved in the practices described. A second observation may point to similarities between these actors: all of them seem to be somehow involved in what could be subsumed under the rubric of 'border management' of the European Union. And although, and this might be a third observation, there are obviously connections between these actors, they seem to pursue different foci in their work – the Frontex study focussing on the imagination of triggers for potential future migration trends,

the eu-LISA conference dealing with the question of how information systems can help making known these trends via risk. A fourth observation may point to the way in which the future is part of the rationales we dived into, a future which is different from what we encounter today both in terms of what we are confronted with (migratory flows due to Arab uprisings) and what we confront this future with (information driven integrated border management and the imagination of futures).

What is particularly interesting for the perspective of this thesis is the question which different future imaginations emerge with regards to the EU border and how they relate to the future in different ways. Primarily, the task of knowledge(s) of the border is to govern the uncertainty it is so fundamentally bound up with. Largely, bordering practices in the EU try to rationalise the future through a logic of risk analysis. Yet, amidst the problem-solving grip on the border expressed in calculative approaches to risk and vulnerability, numerical estimations of migratory flows and ever-more personal risk profiles, a strangely creative take on futurity emerges at the margins of this discourse in the realms of border security professionals. Here, assessing the future depends on imagining it in its very openness. Far from being able to tame the future and the uncertainty associated with it, scenario planning and other imaginative practices govern through uncertainty (Samimian-Darash, 2013: 5). Alongside this take on futurity, we can witness the birth of a whole new range of concepts and their diffusion to the border from other sites, as diverse as management books (the quote stated in the beginning is ascribed to the management consultant Peter Drucker), psychology, and chaos theory. Among these are 'wild cards', 'preparedness', 'contingency planning', 'intuition' or 'situational awareness' (cf. Walters, 2016; Jeandesboz, 2016, 2011; Vaughan-Williams, 2017).

The question I want to approach in this thesis is related to these tentative observations, as I ask *how is the future of the EU border problematised and how can we understand the way in which the future is embraced in current bordering practices.*

I argue firstly, that controlling the border is heavily dependent upon imagining and knowing it. These knowledge practices thus produce the border as an epistemic site to be known through which the border comes into being. Knowing the border conditions how it can be governed.

Secondly, in order to control and know the border, different forms of reasoning render the future knowable, visible and actionable. By and large, theoretical discourse on borders has concentrated on and criticised the calculative regime of risk. However, my argument here is that we can find a problematisation of risk that puts its way of ordering time into question. At the core of this problematisation is a different conceptualisation of what the future is ontologically. Such a problematisation finds its expression in simulating the border through scenario planning and claims to preparedness that render the imagination of something to be prepared for an indispensable precondition. This points to the way in which bordering practices appropriate imaginative capacities in order to overcome the shortcomings of risk analysis.

Thirdly, I argue that these knowledgeable practices at the border that eventually take the future as their object to be governed, produce the border as a virtual realm. Virtuality here refers to an understanding of reality as a bundle of (future) potentialities (Deleuze, 1994; Massumi, 2015; Samimian-Darash, 2013; Lundborg, 2016a). These potentialities (although momentarily unactualised) create a presence of the future, for instance by drawing conclusions from its imagined unfolding in the form of scenarios (Massumi, 2015; Anderson, 2010). Premediating futures related to the border thereby also create a need to act upon them. This results in a situation in which the virtual side of reality – the potentials that *could* actualise – trumps the actual side. Instead, the virtual becomes attached to the core of the logic of securing the border. Embracing the future in bordering practices hence virtualises the border, adding another layer to its inbetween character. The logic emanating from this is subjunctive, depending on imaginability rather than probability. Its conditional 'what-if' form is hard to resist and to invalidate as it circumvents linear reasoning an instead draws its appeal from future causes. The proliferation of a radically open future to the border creates a situational focus that embraces logics of preparedness, contingency planning and intuition. Subjunctive bordering hence problematises risk analysis and completes its foreknowledge by adding a layer of incompleteness that stems from the future's fundamental unknowability. It engages in technologies of government that favour imaginability over calculability. Lastly, it produces a decidedly situational outlook that is focussed on the present and geared to expecting the unexpected.

In this thesis, I trace the imaginations of the future border as well as the means, calculations and techniques through which these imaginations are produced and assessed and the productive effects they unfold in the European Union. I look at the European Union due to the political importance ascribed to securing its external borders. This is due to a political connection that is drawn between secure external borders and the survival of free movement and the single market as one of the central political projects within the EU (van Houtum/Pijpers, 2007; Buckel, 2013). Moreover, the EU invests heavily in the field of border security, expressed by a tripling of funding in border management between 2021 and 2027 (compared to the pre-ceding long-term budget) as well as an increase in personnel and competencies for Frontex, the European Border and Coast Guard, Frontex (European Commission, 2018). Theoretically, this thesis picks up upon critical debates on borders and bordering practices (Rumford, 2006; Johnson/Jones, 2011; Newman, 2006), and the theorisation of the biopolitics of borders (Vaughan-Williams, 2009a; Walters, 2002; Amoore, 2006). The aim is to link these emerging vectors in (critical) border studies to debates on the overlaps between the 'virtual' and security (Massumi, 2015; Lundborg, 2016a; Vaughan-Williams, 2010; Dillon, 2003) and the relation between virtuality and the government of uncertainty and the unknown (Aradau/van Munster, 2011; 2007). Given that thus far, "much research on borders focuses on space, and far less on the structuring role of temporality in conjunction with space" (Walters, 2016: 813), this theoretical approach allows me to highlight the different temporalities at stake in governing the European border.

The future is no stranger to critical security studies. Securitisation theory renders the future an integral part of its grammar of security, as a form of counterfactual reasoning about hypothetical futures (Buzan et al. 1998: 32). In the more Foucauldian literature (in critical security studies), the notion of 'risk' has attracted considerable attention (cf. Amoore, 2011; Bigo, 2002; Aradau/van Munster, 2007; Ewald, 2002). While risk as a technology of government expresses an "epistemological [...] quest for knowledge about the future" (Leese, 2014a: 22), it is bound to a probabilistic epistemology (Lakoff, 2008: 401). Here, "the future is conceived as an already known future, as a future perfect or a futur antérieur" (Bigo, 2014: 220; emph. in orig.). On the other hand, in scenarios and more 'creative' takes on the future, "security practices act upon future possible horizons, indifferent to their strict likelihood or probability" (Amoore, 2018: 6). Famously, the terror attacks of 9/11 were later attributed to a "failure of imagination" (de Goede, 2008: 155; cf. Grusin, 2004). In contrast to probabilistic calculations, they focus on the incalculable and the unknown (Aradau/van Munster, 2011: 19; Lakoff, 2008: 402). So far, with regards to bordering practices, the major part of the critical literature has focused on the risk-related part of the equation (cf. Leese, 2016a, 2014a, 2014b; Bigo, 2014; Leonard, 2010; Neal, 2009; Salter, 2004), regularly discussing security at the border in biopolitical terms (Walters, 2002; Vaughan-Williams, 2009a, 2009b). Yet, also scenarios and imaginations form an important part of current security practices (Krasmann/Hentschel, 2019; Samimian-Darash, 2013; Adey/Anderson, 2012; Lakoff, 2008). Scenarios provide a complementary form of knowledge to risk as they "prepare for the virtual future (which is not assessable or measurable) by an imaginary enactment" (Samimian-Darash, 2013: 5f) and enable action in the face of uncertainty (Cooper, 2006, 2010; Lakoff, 2008).

I build on an update of the biopolitical lenses through a Deleuzean take on virtuality and its temporality. While Vaughan-Williams (2010) has tentatively addressed the virtualisation of the border in his account of 'virtual biopolitics' and Wilson (2018) thematised the role of imagination, a more nuanced examination of the relations between the virtual and the border is still due. My attempt is to contribute to such a theoretical endeavour, supplemented by an empirical illustration of the different epistemic techniques through which imaginaries of the future are mobilised in order to govern the border.

The thesis will be structured as follows. In the following chapter I discuss the notion of the border, arguing that the border has an important stabilising function in IR, building a

cornerstone of its underlying statist assumptions. However, a set of new approaches complicate 'the border', creating theoretical movement along three vectors: from stasis to practice, from geopolitics to biopolitics and from situatedness to in-betweenness. This allows for the development of an exploratory heuristic and theoretical toolbox that helps to make 'the border' graspable. Building on this toolbox, the third chapter tries to make the idea of a virtualisation of borders plausible. Proceeding from Frontex publications and public panel discussions of border security professionals, the fourth chapter conducts an empirical analysis sketching a problematisation of futurity with regards to the EU border, the governmental technologies of imaginative practices and scenario analyses as well as an emerging focus on the situation as a governmental terrain for intervention.

2. Border, what do you mean?

"Borders [...] are no longer at the border" (Balibar, 2002: 89)

If borders are no longer at the border, where are they now, where have they been before and at what point in time have they abandoned their spatial situatedness or character? Discussing various understandings of 'the border', this section works out some of its key features. Reviewing the existing theoretical literature on borders, I emphasise three core characteristics: (1) the border is best understood in terms of the various *bordering practices* that bring it into being; (2) understanding the border requires us to move beyond geopolitical imaginations and to use *biopolitical* lenses; (3) the border is *in-between*, both in spatial but also especially in temporal terms. One of the problems of this task is that it engages in the act it seeks to describe. Defining a border already implies processes of demarcation, drawing lines, including and excluding:

"The idea of a simple definition of what constitutes a border is, by definition, absurd: to mark out a border is, precisely, to define a territory, to delimit it and so to register the identity of that territory, or confer one upon it" (Balibar, 2002: 76).

To add to this, the question 'what is a border?' either plainly ignores or necessarily implies follow-ups on "how, when, where, and who makes the border" (Nail, 2016: 3). The aim of this section is therefore not to give a comprehensive definition of the border but to review how the border is important to IR in general and to answer to the above questions by providing some theoretically grounded guidelines.

2.1 B/Ordering International Relations

International Relations (IR) as a discipline for a long time took sovereignty as its starting point and understood the border as a 'line in the sand' that served to territorially demarcate sovereign nation states. John Agnew refers to this (theoretical) practice as the 'modern geopolitical imagination', a "system of visualizing the world with deep historic roots in the European encounter with the world as a whole" (Agnew, 2003: 6). This constitutive imagination that glues together statehood, sovereignty and the border is also implicit in the classical Weberian definition of statehood as "a human community that (successfully) claims the monopoly of the legitimate use of force *within a given territory*" (Weber, qtd. in Vaughan-Williams, 2009a: 2; emph. in orig.). Borders speak order to territory and thus make states as territorially defined, clearly demarcated areas. Territoriality and territorial situatedness of sovereign nation states is one of the hallmarks of IR (Albert et al. 2001: 8f.). Classically situated at the outer limits of territorially defined sovereign nation states, borders have their genealogy in the works of political geographers of the late 19th and early 20th century (Walters, 2002: 563). Here, the border becomes a central signifier of the overarching order of international relations, as born in Westphalia in 1648 (or so the story goes):

"Frontiers are indeed the razor's edge on which hang suspended the modern issues of war or peace, of life or death of nations [...]. Just as the protection of the home is the most vital care of the private citizen, so the integrity of her borders is the condition of existence of the State" (Curzon, 1908, qtd. in Walters, 2002: 563).

The role of the border in IR is to separate a safe inside, guaranteed by national governments from an anarchic outside bound up with insecurity, uncertainty and chaos (Salter, 2012: 738; Ashley, 1988; Walker, 1993; Vaughan-Williams, 2017: 5). This inside/outside understanding of international relations provides order to the discipline more broadly (Walker, 1993). The 'line' serves as the dominant metaphor describing the border: Static, territorially bound and contested only through the geopolitical struggles of state agents. The border is also important in order to know what one fears. (Neo-)Realist understandings of security rely on the state border "to frame their reading of the key elements of security" (Vaughan-Williams, 2009a: 3), producing the referent object (national security), the alleged source of threats (other states under conditions of anarchy), and the contextually intuitive solution of interstate warfare to overcome threats. Assuming a dangerous, anarchic outside, the inside gains legitimacy and the state is rendered an unproblematic starting point:

"theoretical discourse of the anarchy problematique must 'find' the state to be a pure presence already in place, an unproblematic rational presence already there, a sovereign identity that is the self-sufficient source of international history's meaning" (Ashley, 1988: 231).

What the border then does in and for IR is that it fixes and stabilises. It "conditions the possibility of thinking" (Vaughan-Williams, 2009b: 730). Borders thus do not only bring the notion of territory into being, as "territory must have boundaries of some kind if it is to be anything more than simply land" (Wendt, 1999: 211). Their "world-making character" (Salter, 2012: 736) can be found in the practice of theorising itself, pointing to the reflexivity of IR as a discipline and as a way of knowing. Rob Walker has aptly characterised "theories of international relations as a constitutive horizon of modern politics in the territorial state" (Walker, 1993: 9). Theorising itself is a practice and imagining the border as a line in the sand underwrites the modern geopolitical imagination in important ways. While (uncontested) borders thus stabilise the state system empirically, as mutual reassurances of sovereign power, they also provide order theoretically, as they take part in the political construction of the centrality of sovereignty (cf. Ashley, 1988: 229). The border is thus not merely a necessary result of sovereignty but "a condition of possibility for sovereignty itself" (Salter, 2012: 750). Inevitably entangled with the self-imposed need of sovereignty that continuously works on its own reproduction, the imagination of the border as a line in the sand and the various practices that make up the border and seek to control it are bound up with performances and engage in the (re-)production of the sovereign state. Borders are themselves part of the "very concrete political practices" that are involved in "claims to sovereignty" (Walker, 1993: 13). If we follow these lines of reasoning as developed in critical IR, then we cannot understand the border as a thing 'out there'. Instead, it becomes imperative to look at the logic that underpins the (potentially changing) concept(s) of the border, to understand them as "arms in symbolic and political struggles between different groups" (Bigo, 2002: 67), as these logics unfold their own effects in concrete practices.

Within these concrete practices, the importance of questioning the inside/outside b/order becomes tangible. Didier Bigo (2001) has emphasised the empirical entanglement of inside and outside in an analysis of policing. New securitising discourses thereby provide the grounds for this distinction to be blurred. As new knowledges of the interpenetration of internal and external security gain ground among security professionals, the two realms merge into a Möbius ribbon through which internal and external are entangled. The themes of migration and borders – beyond the constitutive character of the border for sovereignty discussed above, Torpey has pointed to the state-making function of the control of the "legitimate means of movement" (2000: 1) – become neuralgic points in the development of a sense of unease that relies precisely on the entanglement of inside and outside (Bigo, 2001: 113). Also, "the space of border controls and the political-territorial borders [...] no longer neatly coincide" (Walters/Haahr, 2005: 82), notably in the European Union. While large parts of IR maintain a theoretical commitment to the inside/outside distinction, "agencies of security [...] have expanded into a space that no longer respects sovereign borders" (Bigo, 2001: 115). As security as a practical knowledge

leaves sovereign statehood behind, an empirical misfit arises if we continue to regard borders as functions of sovereign power only (although they may remain important signifiers thereof): "the size and defence of territory is no longer the privileged index of state power" (Walters/Haahr, 2005: 81). Instead a shift in the rationality of security accompanies a shift in the understanding of borders, from the control over territory to the control over population and – related to this latter entity – the control of time (cf. Foucault, 2009; Agnew, 2003; Walters/Haahr, 2005).

2.2 Analytics of the border

2.2.1 From stasis to practice

Proceeding from the fundamental critique of sovereignty and "a basic dissatisfaction with the 'Line in the Sand' metaphor as an unexamined starting point for the study of borders" (Parker/Vaughan-Williams, 2012: 728), several authors have called for a turn in border studies that aims at going beyond the geopolitical horizon of the field (i.a. Salter, 2012; Johnson/Jones, 2011; Vaughan-Williams, 2009a, 2017; Côte-Boucher et al., 2014; Balibar, 2002; Parker/Vaughan-Williams, 2012). In line with Walker's insistence on the focus on practices, the border is "never simply 'present', nor fully established, nor obviously accessible" (Parker/Vaughan-Williams, 2012: 728), and instead becomes tangible and gains relevance on the ground through practices performed by a variety of actors (Côte-Boucher et al. 2014: 198). Chris Rumford has coined the term 'bordering' to refer to the dynamic process through which borders are enacted (Rumford, 2006, 2011; Wilson/Donnan, 2012: 18) and to the idea that borders need not be confined to geopolitical lines. In a more expansive reading of bordering, we may even argue that borders need not be spatially bound at all and that bordering entails not least significant temporal and epistemic elements. Through a perspective that emphasises bordering as a practice, borders also "lose their abstraction – through their everyday practices, the wide-ranging actors involved in securing borders give practical meaning to border security" (Côte-Boucher et al. 2014: 198). A bordering perspective then both points to and complicates the questions who borders and where a border occurs (Johnson/Jones, 2011: 62). It opens the range of actors that are involved in bordering (and possibly even the notion of actorness per se; cf. Jeandesboz, 2016) and moves beyond an *a priori* focus on traditional state actors (Rumford, 2011: 67); it extends our view on the functionality of borders, arguing that borders do not merely divide but also connect (Rumford, 2011: 67; cf. also Nail, 2016 and the discussion of the biopolitical border below); and it emphasises that bordering involves claim-making, as it opens up possibilities to actors engaging with the border to constitute themselves in this engagement (Rumford, 2011: 68). The notion of bordering is crucial in order to move beyond a servile affinity with sovereignty and the geopolitics of borders and to understand the complex

ways in which borders are enacted. These practices also imply a delocalisation of borders (Walters, 2006: 193; Bigo, 2002: 77; Salter, 2004: 76), blurring clear inside/outside distinctions (Bigo, 2001). For example, practices of remote control move the border control to a territory not formally related to that of the (controlling) nation-state (Walters, 2006: 193f), or, border control may be delocalised through moving the control to a digital realm (cf. Leese, 2016a; Vaughan-Williams, 2009a).

Several authors have pointed to the important role of security professionals in bordering practices (cf. Bigo, 2001; 2002; 2014; Côte-Boucher et al., 2014). Security professionals acquire a "sense of the game" (Bigo, 2002: 75) of securing the border and therefore act upon it in specific ways. These ways are intimately linked to specific "regimes of knowledge" (Foucault, 1980a: 131) within which they operate. Knowing a phenomenon and approaching it practically are interrelated. Foucault captures this interrelationship through the concept of problematisation. A problematisation produces a space of "conditions in which possible responses can be given; it defines the elements that will constitute what the different solutions attempt to respond to" (Foucault, 1984: 389). Analysing problematisations aims at interrogating "how a given object [...] is constituted as a problematic object under particular circumstances" (Bonditti et al. 2015: 167; emph. in orig.; cf. also Walters, 2008: 162). Problematising practices therefore do not take the border as a given. The question instead becomes how the border is constituted as an "object of thought" (Foucault, 1988: 257) through discursive and non-discursive practices (see also chapter four). Similarly, Walters argues that "we should understand borders in terms of their historical and contingent interaction and formation within specific regimes of knowledge and practice" (Walters, 2016: 797). Problematisations rely on statements articulated as relevant knowledge of a certain problem, thus conforming "to a set of rules and constraints, characteristic [...] of a given type of scientific discourse in a given period" (Foucault, 1997: 61; cf. also Foucault, 1988: 257). They are thereby not limited to articulating something as a problem but instead go further and propose solutions:

"problematizations function to render problematic certain old practices at the same time that they establish a basis for the elaboration of certain new practices. An analytical view of problematizations hence highlights how problem descriptions and proposed solutions are mutually dependent and constitutive" (Koopman, 2013: 101).

It is therefore possible to understand problematisation as a practice taking place in the professional universe of border security professionals. Hence, in a first instance problematisation does *not* refer to an analytical decision to render something problematic (in the sense of criticising it) but rather understands problematisations *themselves* as the objects of inquiry (cf. Koopman, 2013: 98f; Bonditti et al. 2015: 169). However, it is of course the case that analysis remains reflexively bound up with its 'object'. By opening up specific problematisations they may then

be criticised, thus becoming part of a different 'analytical' problematisation (Koopman, 2013: 99; Bonditti et al. 2015: 171). Unless noted otherwise, I will talk of 'problematisation' in the first sense discussed here and use it in the context of how specific phenomena at the border emerge as problems.

Linking the Foucauldian reading of problematisations to the evolving shift from 'the border' towards 'bordering' as a practice, I think that we need to understand the border in terms of the various practices that construct it as a particular sort of thing, that bring forth a set of problems to which 'the border' needs to answer, an answer for which a particular form of functionality is needed. Bordering can therefore be understood as a knowledgeable practice that certain actors employ in order to render the border governable (Milliken, 1999: 229). We therefore also need to expand our understanding of 'the border' from a spatial reading to one that takes it seriously as an epistemic object.

2.2.2 From geopolitics to biopolitics

Louise Amoore's observation that "emergent forms of bordering seek to reconcile security with mobility" (Amoore, 2011: 64) insinuates the need to go beyond a geopolitical imagination of the border and exclusively sovereign accounts of power (Agnew, 2003: 129). Instead, Amoore (amongst others) has called for a turn in border studies away from geopolitics and towards a biopolitical imaginary of the border (Amoore, 2011: 64; cf. also Vaughan-Williams, 2017: 7; Salter, 2008: 251). The starting point of these approaches is a critique of the narrow understanding of power that is expressed in a geopolitical understanding of the border. Geopolitical accounts of borders take a classical understanding of power as a given that limits its exercise to the operation of "A has power over B to the extent that he can get B to do something that B would not otherwise do" (Dahl, 1957: 202f). Viewing the border as a tool for nation states to perform their sovereignty through exclusion affirms such a reading. Similarly, when David Newman points to the fact that borders are sites diffused with power, he reduces 'power' to an expression of the "interests the opening or closing of borders serve" (Newman, 2006: 176). In contrast, Michel Foucault has famously called for "cut[ting] off the king's head" (Foucault, 1980a: 121), which means to go beyond analyses of power that are focused on coercive, sovereign practices. Instead, Foucault highlights the productive character of power:

"We must cease once and for all to describe the effects of power in negative terms: it 'excludes', it 'represses', it 'censors', it 'abstracts', it 'masks', it conceals'. In fact power produces; it produces reality; it produces domains of objects and rituals of truth" (Foucault, 1995: 194).

While sovereign power implies coercive action in the sense of the Dahlian definition, biopolitics aims at the production of populations. Biopolitics discovers the population through a set of knowledges through which the population is established as a category and as an entity to be governed (Foucault, 2009: 65; Dean, 2008: 113; Bigo, 2008: 99) – it works by "making up people" (Hacking, 2002: 6). Biopolitics aims at "the administration of bodies and the calculated management of life" (Foucault, 1978: 140) and tries to make the different dynamics – which the population is seen to comprise of – function in a way that they "work in relation to each other" (Foucault, 2009: 69). At the core of Foucault's reading of biopolitics and security we find circulation (Vaughan-Williams, 2009a: 8; Wichum, 2013: 166). Instead of viewing security as a logic bound to exceptionalism and as a directly forceful, repressive power that has freedom as its radically open opposite, security and liberty work together, and security cannot function without a system of liberties (Bigo, 2008: 107f). Security does not seek to repress circulation but instead sees it as an "an inextricable component of what it means to live" (Adey, 2009: 277).

Security dispositifs are the political technologies through which populations are rendered knowable, calculable and governable (Dillon/Lobo-Guerrero, 2009: 266). A dispositif depicts

"a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid" (Foucault, 1980b: 194).

Dispositifs of security are thus concerned with "making possible, guaranteeing and ensuring circulations" (Foucault, 2009: 51) while at the same time regulating them "in such a way that the inherent dangers of this circulation are cancelled out" (Foucault, 2009: 93).

While governing borders increasingly builds on biopolitical rationalities, it should not be assumed that different forms of power are mutually exclusive, just as it would be premature to understand biopolitics as a teleological successor of geopolitics. Rather, we deal with a complex topology of power in which its different forms interact and may overlap (Collier, 2009; Dillon, 2004; Connolly, 2004). For the study of borders, it is particularly important not to dismiss the sovereign elements of borders. On the one hand this holds the *political* danger of heralding neoliberal fantasies of a borderless world that ignore the exclusions built into the idea of its intellectual heritage. On the other hand, it is *analytically* problematic since opposing biopolitics and sovereignty as differences in kind excludes the possibility of their interaction. Borders are markers – not least symbolic – of sovereign states. At the same time, if there is anything like an *ethos* of poststructuralist theorising and analysis (in IR), it is, starting with Walker's (1993) question of inside/outside and Ashley's (1988) anarchy problematique precisely one of the exclusionary effects of sovereignty, and the question of how sovereignty is performed and reproduced, from the banal operation of technical devices in bordering practices to the theoretical discourses of IR as a discipline.

Sovereignty is thus anything but absent in biopolitical bordering practices, if we take it to signify the production of violent, coercive and exclusionary orders and effects. Following Vaughan-Williams, bordering practices are often "essentially sovereign practices that put lives in habitual jeopardy" (Vaughan-Williams, 2010: 8), which the biopolitical paradigm too often dismisses. Eventually, "[t]he activity of the biopolitical machine is inherently linked with sovereignty, specifically a sovereign decision about whether certain forms of life are worthy of living" (Vaughan-Williams, 2010: 9). Biopolitics is thus rather an evolving rationale that underpins and renews sovereignty. This also concerns the spatial and temporal question of decisions, which are "not necessarily isolatable in space-time" (Vaughan-Williams, 2009b: 744).

Looking at biopolitical bordering practices and emphasising the biopolitical character of borders hence does not imply the end of sovereignty but rather hints at shifts in the underlying regime of truth through which borders are governed. While offshoring bordering practices allows for states – and notably the European Union – to disentangle sovereignty and territoriality, a view at temporality highlights how the temporal focus of sovereignty on the momentary decision to include or exclude a foreigner at the (territorially situated) border may be broadened by inquiries into how the predicaments of decision, that take into account potential future layers, informs and coins decisions. Foucault argues - building on the historical example of 18th century town planning – that security "works on the future" (Foucault, 2009: 20). Security is then not necessarily (only) about the management of present circulation but also about estimating future circulations, although for Foucault, these estimations remain tied to statistical calculation (Foucault, 2009: 89; cf. Bigo, 2008: 99). Its temporality is not bound to the present but also embraces the future, asking "what might happen" (Foucault, 2009: 20). The future is therefore "not necessarily a threatening and unknowable externality" (Hong/Szpunar, 2019: 13, fn. 4), and instead is rationalised through techniques (such as risk) in the present. Through this process, the future becomes "a route by which the maximization of the present is achieved" (Hong/Szpunar, 2019: 14, fn. 4). Security dispositifs thus act on the future as they "anticipate the radical uncertainty of threatening events by activating specific practices and forms of knowledge as well as discursive and non-discursive elements to rationalize this uncertainty" (Wichum, 2013: 168).

Building on Paul Virilio who argues that "geographic localization seems to have definitely lost its strategic value and, inversely, that this same value is attributed to *the delocalization of the vector*, of a vector in permanent movement" (2006: 151; emph. in orig.), James Der Derian notes that international relations shift from "rigid geopolitics, to a site of accelerating flows, contested borders, and fluid chronopolitics" (Der Derian, 1992: 129f). With regards to the nexus of borders and chronopolitics, there is thus a double movement: on the one hand the really existing acceleration of and in world politics tends to subvert sovereignty as performed at national borders (Huysmans, 1997: 375), or, respectively, produces new kinds of political entities such as the European Union that try to find new forms of sovereignty and 'open borders' (at least in internal relations) to confront this acceleration. On the other hand, borders themselves approach new temporalities, thereby mimicking the speed hostile to sovereignty and transforming "a part of its own structure in the image of what it fights" (Massumi, 2015: 11; emph. in orig.). Biopolitics is moreover a crucial corrective to geopolitics as it moves away from looking at the power exerted at/through borders in merely restrictive terms. Instead, in a variety of ways, it is itself productive: it produces knowledge about mobile populations (Walters, 2002; Torpey, 2000), it sorts those populations through risk categories (Leese, 2016a; Amoore, 2006; Salter, 2004), it tries to fold the future back into the present by extrapolating statistics and calculating (ir-)regularities (Bigo, 2014) and it does so by applying a range of technologically sophisticated means (Broeders, 2007; Glouftsios, 2018; Jeandesboz, 2016). Walters (2006) frames these and other empirical observations as the development of a control function of borders. Borders "operate like filters or gateways" (Walters, 2006: 197). They do not exist to repress movement per se but to manage the tension between good and bad circulation (Leese, 2016a: 415). The potentially dangerous uncertainty regarding mobilities "is addressed by identification and by making known" (Adey, 2009: 277; Beauchamps et al. 2017; Walters, 2006:199). The sorting function of borders, and thus the biopolitical rationale that differentiates between good and bad forms of circulation, "is becoming far more central to the practice of the border than before" (Walters, 2006: 197; cf. also Lyon, 2005: 67). The security dispositif, on which the reading of the border as biopolitical relies, thereby "not only acquires a speed that transcends borders, but also an ambition to monitor and control the future through profiling and morphing" (Bigo, 2008: 109).

2.2.3 From situatedness to in-betweenness

If we understand the border as a multiplicity, enacted through problematisations of security professionals and aimed at biopolitically governing populations, do we have to assign it a specific 'terrain' and how can we make sense of such a 'terrain' of the border? Critiques of the geopolitical imagination and empirical illustrations that highlight the delocalisation of borders led various authors to the conclusion that the border is essentially "everywhere" (Lyon, 2005), that the border is a "continuum" (Vaughan-Williams, 2010), or that we observe a "new ubiquity of borders" (Balibar, 2002). While these suggestions are highly illustrative, they still remain somewhat tied to spatial imaginations (Lalonde, 2018: 1362), by trying to describe a spatially framed situatedness of borders (although these spaces may be less stable than territorial lines,

they may emerge and dissolve more quickly and they may be dispersed and reach beyond the limits of sovereign states). In order to avoid this "territorial trap" (Agnew, 2003: 53), different metaphors are needed. In-betweenness provides a good way to think about the 'future' of the border. Thomas Nail urges us to think the border as a (mathematical) limit, as a "process that infinitely approaches the point of bifurcation" and as a "fuzzy zone-like phenomenon of inclusive disjunction" (2016: 3), i.e. a phenomenon that is never quite complete, never graspable in its totality but constantly enacted. I borrow from Nail (2016: 3) to suggest 'in-betweenness' as a form to illustrate the diverse (non-)situatedness of the border, not only in spatial but importantly also in temporal terms.

Thereby, I do not want to argue that future imaginations are not bound up with sovereignty, and thus (in terms of the guiding rationality of these performances) space or territory. Quite the reverse, they are most likely performative responses to a perceived need to restore or preserve sovereignty in view of uncertain potentials (de Lint, 2008: 182; Lalonde, 2018: 1363). However, it would also fall short analytically to simply subsume these actions to spatial characteristics, or to think of territory as a fixed condition 'out there'. Instead, borders are in-between in spatial terms. Due to their versatile, multifaceted character (Walters, 2006: 198) and the fact that borders emerge at different places for different persons (for example through practices of remote bordering and offshoring or through the datafication of bordering practices and their shift towards the digital space, cf. Broeders, 2007), it is not possible to analytically fix borders spatially (Balibar, 2002: 81). Instead, it is an empirical task to explore the various spatial incarnations of the border and to point to the spatial in-betweenness of borders. If we connect the metaphor of in-betweenness to the observation that borders experience a sophistication of their filtering function, this also points to the question how in-betweenness (the filtering function potentially contributing to the spatial vacillation of the border) is actively manufactured through bordering practices and which forms of power are performed through the lack of tangibility of the border and its subjects.

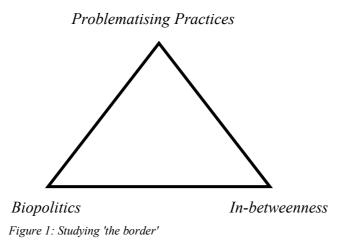
Borders are also in-between in temporal terms. This is particularly so with regards to the relevance that risk calculations gained, mostly in attempts to render the border 'smart' (Jeandesboz, 2011; Amoore/de Goede, 2005; Bigo, 2014; Leese, 2014a, 2014b, 2016; Neal, 2009; Amoore et al. 2008; Salter, 2004). Risk as a technique works by "capturing contingency and folding it into human agency, rationalizes what was once left to the supernatural, and translates destiny into modifiable and manageable numbers" (Leese, 2014a: 23) and thereby tries to act upon the future by changing its vectors in the present. It works through promising "calculable uncertainty" (Anderson, 2010: 790). While the concrete workings and versions of managing the future will be discussed in the next section, the notion of risk helps to illustrate the temporal in-betweenness of the border, as it points to the complex temporality of the border and thus

further complicates traditional accounts of the border: "Temporally, too, borders are not as fixed as our animating metaphor otherwise implies, but ever more pre-emptive, risk-assessed, and designed to be as mobile as the subjects and objects in transit that they seek to control" (Par-ker/Vaughan-Williams, 2012: 730).

Martina Tazzioli argues that "temporality itself plays a crucial role in the reshaping and the enforcement of migration controls" (Tazzioli, 2018a: 14), pointing mainly to the way in which time becomes a resource to control migrant circulations. Simon Sontowski (2018) demonstrates how problematisations of temporality laid at the core of the establishment of the EU smart border package. Adrian Little (2015) also highlights the temporality of borders and introduces 'complex temporality' which "invokes processes of change that require responses to developing phenomena that are not fully comprehended as they emerge into political consciousness" (Little, 2015: 432), thereby also hinting at the uncertainty characterising (future) temporalities. In-betweenness thus emerges from overlapping temporalities at the border, both in terms of a migrant's experience of temporality and the strategic uses of pace and protraction by border professionals. However, temporality is also at the core of the logic of securing and controlling the border. Julien Jeandesboz points to the "temporal displacement" (2011: 126) of the border which is at the basis of modern border technologies that aim at proactively managing projected flows of migrants. The visibilities of such systems (for instance EUROSUR; cf. Jeandesboz, 2011; Walters, 2016; Wilson, 2018), that is the real-world surface through which border professionals experience the border as their object to be governed, represents a "pastiche of multiple temporalities that range across past, present and future" (Wilson, 2018: 60). Professional imaginations of the border then help to contribute to the in-betweenness of the border.

Starting out from Balibar's provocative statement that borders are no longer at the border, I sketched three interrelated dynamics that characterise today's borders. Reviewing the literature in view of my research question, three analytical imperatives can be identified that help us to grasp 'the border' (Fig. 1) I argued that in order to gain an understanding of 'the border' it is important to understand it as the result of specific problematisations. Hence, the very notion of 'the border' is problematic as it implies stasis where there are dynamic practices. Problematisations entail power – they do so in producing the border as a particular kind of thing that has to respond to specific kinds of problems. In line with Foucault's reading of biopolitics, I suggested that problematisations of the border move away from territory and towards the question of populations and, inherently related to this, temporality. Lastly, I tentatively approached the question *what* a border is as an entity that is characterised not by clear situatedness of clearly marked (conceptual and functional) demarcations, but by in-betweenness, dynamic and flux. While this is admittedly a fairly 'unanalytical' term, as it builds precisely on the lack of clarity

and neatness, it describes the current move away from the spatial and temporal situatedness of borders. In-betweenness then speaks to the ontology of borders and points to their non-situatedness in spatial and temporal terms.



While my question asks on the one hand for 'the border', it also points to the role of 'the future' in bordering practices more specifically. The next chapter will therefore try to unpack the interrelationship between (in-)security, (un-)certainty and 'the future' and then refer these questions back to the quality of 'the border' more generally.

3. Security, Virtuality, and the Future Border

"the strangest truth about the universe that any of us has stumbled on since relativity – that you can never know everything about the whereabouts of a particle, or anything else ... because we can't observe it without introducing some new element into the situation [...] – because if you don't know how things are today you certainly can't know how they're going to be tomorrow" (Frayn, qtd. in Edkins, 2019: 55f).

Quantum physics is a far cry from security studies... or so we would assume. For a long time, physicists had been traders of truth, assessing, measuring and explaining the real world. New-tonian mechanics enabled scientists to make causal predictions. The paradigm started to crumble when quantum mechanics entered the picture. Still committed to its predictive predecessor, the underlying calculations changed, basing prediction on a probabilistic rather than a causal logic. Physics met uncertainty: "The uncertainty principle formulated by Heisenberg [...] reflected the fact that it had proved impossible to devise experiments to measure things on an

atomic scale without at the same time influencing the things that the experiment was designed to measure" (Edkins, 2019: 55). Remaining inevitably attached to the present, attempts to arrive at predictions and foresight introduce themselves into the equation they seek just to describe.

Similarly, my argument in the next section is that security as a rationality is tied to the future and the uncertainty expressed by this future. Embracing a principle of radical uncertainty, and thus departing from a problematisation of the ontology of 'the future' as a repetition of past events and instead conceiving the future as a potential realm of virtuality, security needs to find creative epistemic ways to deal with an unknown future. This is particularly important in bordering practices, since they imagine sovereignty to be at stake. By producing these imaginations of the future, however, bordering practices remain attached to the present. To grasp this interrelation of futurity and the present, I build on the concepts of virtuality and virtual security as well as a durational reading of temporality. Instead of understanding the future as a linear follow-up to the present, this take allows for a theorisation of the inseparability of past, present and future, pointing to the presence of the future. Investigating the knowledges that map virtual realms and the temporalities these knowledges play with and enact then allows me to work towards a reading of *subjunctive bordering at the EUropean border*.

3.1 Security and the future

Security and the future are inextricably entangled. For securitisation theory, the future is part of securitising speech acts and tied to the specific grammar of security. As Buzan et al. (1998) argue, security arguments are "about the future, about alternative futures—always hypothet-ical—and about counterfactuals" (Buzan et al. 1998: 32). Due to this grammar, answering the question if and how a specific situation qualifies as a question of security can never be objective. Rather, it is the result of a discursive extrapolation of a counterfactual – what would happen if no action were taken? – and politics – are the effects following from the ascription of security bearable? (Buzan et al. 1998: 32)

For the Copenhagen School, security and the future become entangled in the moment of decision, because the future is at stake. This is not only an inductive observation but also a theoretical assumption that lies in the conceptualisation of speech acts: "the concept of 'act' politicizes securitizing processes precisely by identifying particular moments that concentrate developments into actualizations of a decision that ruptures normal procedures of practice" (Huysmans, 2011: 367; cf. also Williams, 2003: 521). The future is a necessary element of the grammar of security that is bound to the (future) survival of a referent object, as well as to the nature of the (constructed) existential threat that is not existential in the here and now but only if it unfolds and thus threatens survival. The audience then decides if it accepts the extrapolation of the future as presented through a securitising move. The Copenhagen School thus observes a "sovereign politics of time, which conditions the birth and continuous reproduction of a particular historical period in which the exception is considered necessary" (Lundborg, 2016b: 268). The securitising move depends on the invocation of counterfactual certainty, in the sense that a future – if it were to unfold in the way rendered intelligible by the securitising move – would undermine the possibility of political decision, as it holds the potential to "undercut the political order", thereby altering "the premises for all other questions" (Wæver, 1995: 52). Invoking a certainty yet to come, securitisation's grammar articulates the aim of preventing a threat. Futurity is a menacing continuity the extrapolation of which forms the basic appeal of the securitising speech act. Audience acceptance depends on certainty as well, since only the perception of a convincing extrapolation will likely convince said audience to accept going beyond the rules of the game. Prevention works with a linear conception of time, which is "rooted in the present and seeks to prevent an event happening in the future" (Coleman, 2016: 122; cf. also Massumi, 2005). To be sure, my argument is not that undecidability and uncertainty do not play a role in the security grammar of the Copenhagen School. Quite contrary, since securitisation is about (fundamentally unknown) futures, it involves uncertainty. As Michael J. Williams points out, denying the future-orientedness of the Copenhagen School would result in "twisting of theory to suit the argument" (Williams, 2008: 68). The certainty involved in the Copenhagen School rather lies in its reaction to uncertainty: Creating 'sovereign moments' - and thereby producing certainty in the face of uncertainty and a certain basis for action.

What remains absent from the view of securitisation theory are the various predicaments of decision – how are uncertainties mapped, which devices identify risk, how is 'security' assembled – in other words, how and on which basis do securitising actors arrive at their decisions to (try to) securitise or not to securitise? (cf. Aradau/van Munster, 2011: 24; Salter, 2008: 262). Engaging with the notion of securitisation as developed by the Copenhagen School, other authors have highlighted the role of knowledge and uncertainty in security practices, which is also relevant to the study of the border. This is not least the case since the predicaments of decision at the border change, meaning that the rationality of border security no longer univocally involves the securing of sovereign territory, but also the biopolitical securing of life. Also, the projected potential certainty of undermining the possibility for sovereign decisions is supplemented by an emerging focus of security practices on uncertainty, which I focus on in the following.

My argument revolves around the question of uncertain futures that are fundamentally incalculable – as opposed to the certainty implied by the Copenhagen School's preventive take on a future threat. We may even follow Ole Wæver who in a more recent intervention describes the character of the Copenhagen School as Arendtian, highlighting the "central role of the audience" (Wæver, 2011: 468). Yet, it remains unclear how the unknowability and uncertainty of

futurity affect the development that eventually leads to a decision to confront a relevant audience with a securitising speech act:

"to focus too narrowly on the search for singular and distinct acts of securitization may well lead one to misperceive processes through which a situation is being gradually intensified, and thus rendered susceptible to securitization, while remaining short of the actual securitizing decision" (Williams, 2003: 521).

Again, the predicaments of decision form a blind spot relevant to an understanding of the role of futurity for the operation of security and securitisation. These predicaments are tied to knowledge production. In fact, as J. Peter Burgess argues, in the "moment the unknowable becomes known, it ceases to be a question of security" (Burgess, 2011: 2). Insecurity is turned into security through knowledge. Accordingly, the fundamental task of security – or practices of securing – is to render uncertainties governable by making them known or subjecting them to calculations which render uncertainty calculable (Amoore, 2014: 435). From this perspective, 'the future' is thus more than a rhetorical figure in a securitising speech act. Instead, it is the ontology of the future – non-existence – and the respective epistemological consequence – uncertainty – that mark the future as a security problem.

While I share the starting point that (in-)security is essentially related to the question of knowledge, one problem with the approaches discussed so far is that they approach 'reality' as actualised reality – be this expressed in the ontology of non-existence of the future or with regards to the social construction of security in speech acts (cf. Lundborg, 2016a: 256). The following section instead engages with the virtual side of reality – the realm of potentials and the marks these potentials leave on the present. It employs a non-linear understanding of temporality which enables us to go beyond sovereign moments of decision and to theorise the presence of the future at the border. Moreover, it helps us to understand how attempts to govern uncertainty beyond risk navigate along the limits of knowledge by mapping and sketching the co-presence of various futures. Mapping the virtual is therefore an attempt to security (Burgess, 2019) – present, thereby enabling a basis of action in the face of uncertainty.

3.2 Virtuality

My understanding of virtuality in bordering practices builds on Deleuze's differentiation between the virtual and the actual and highlights both the reality of the virtual as an ontological realm and the temporal implications of the virtual/actual divide. This makes it possible to grasp virtual security practices' attempt to create a presence of the future which they actualise and depend upon in order to confront uncertainty through security practices at the border.

3.2.1 Virtuality in Critical Security Studies

In critical security studies, the concept of virtuality was principally introduced through the reception of Jean Baudrillard and Giorgio Agamben (cf. Lundborg, 2012, 2016a; Debrix/Barder, 2012; Vaughan-Williams, 2010; Dillon, 2003; Der Derian, 2000, 2001). While Baudrillard focuses on the non-reality of the simulacrum, and Agamben uses virtuality in order highlight the condition of modern biopolitics as the potential to be excluded within a generalised state of exception, both use the virtual as a means to assess an empirical condition in the world (cf. Lundborg, 2016a). Due to the imprint these authors left on the concept of virtuality, I want to shortly address some of the reservations that motivate my turn to Deleuze.

Baudrillard opposes the virtual to the real, as a new reality (Lundborg, 2016a: 257). As the simulacrum increasingly replaces reality as the referent object of human consciousness, the virtual trumps the real in the sense of a new reality built on top of an old one that we are no longer able to perceive. As "simulation threatens the difference between 'true' and 'false', between 'real' and 'imaginary'" (Baudrillard, 1983: 5), reality "cannot be taken as a pure, stable foundation" (Vaughan-Williams, 2010: 9). Instead, it is virtual to the degree that it is only accessible as hyperreality (Vaughan-Williams, 2010: 9). In this line of argument, the virtual remains part of an epistemological problem of access to a 'true' underlying reality. The virtual is thus not real. Rather than engaging in ontological questions, Baudrillard claims that virtuality conditions epistemology, as a mediated view obscuring a reality increasingly replaced by signs and symbols. Regularly, this mediation is illustrated via "the proliferation of electronic and digital media, screens and computers means" through which "reality has become increasingly virtualized" (Lundborg, 2016a: 257). As such, Baudrillard's approach risks reducing the question of virtuality to a "techno-virtual" (Dillon, 2003: 545) realm at the expense of a more thorough investigation of the "onto-virtual" (Dillon, 2003: 546). In turn, this makes the approach prone view virtuality as an empirical terrain that is abridged as a world of data, computer screens and digital mediation. However, "[n]othing is more destructive for the thinking and imaging of the virtual than equating it with the digital" (Massumi, 2002: 137) because such an understanding curtails us of the possibility to engage with the question of the reality of the virtual. In contrast, it may be more useful to try and understand virtuality as a processual development that places both the actual and the virtual on the level of reality and looks how the virtual affects the actual (cf. Dillon, 2003: 546). As Massumi puts it, "[t]he issue becomes, not an epochal struggle between the artificial and the real, but more positively the formative relation between the virtual and what actually appears" (Massumi, 2014: 56).

For Agamben, on the other hand, the virtual consists in the potential to be excluded. For him, "we are all virtually *homines sacri*" (Agamben, 1998: 68; emph. in orig.). Agamben connects biopolitics and sovereignty to identify a political structure of the 'West' in which life is

always precarious since there always remains a potential of exclusion through the sovereign ban and the degradation to bare life (Lundborg, 2016a: 260): "the space of the ban encapsulates all of us, potentially, [...] into a limitless domain of exception where life (the life of the human) can at any moment be relegated to abandon or indifference" (Debrix/Barder, 2012: 72). Here, sovereignty is described through its virtual characteristics, its potential ability of exclusion. If, however, virtuality is merely a trait of sovereignty then it is effectively reduced to the actualisation of sovereignty as the ability to exclude or to kill (Lundborg, 2016a: 265). It is rather indifferent to the question of how the co-presence of multiple potentials feeds back on the present. It also forces us to read the virtual through the Agambian hubris of a totalising 'Western' political structure, which may blur some of the nuances of modern government.

Notably, with regards to the border, Nick Vaughan-Williams has sought to bring Agamben, Baudrillard and Foucault into dialogue. His concept of 'virtual biopolitics' at the border highlights that

"practices of identity management and preemption associated with the UK border security continuum can be read precisely as new virtual cartographies of total knowledge and vision, which seek to identify and root out uncertainties about who or what might pose a threat" (Vaughan-Williams, 2010: 11).

Bordering practices aim at simulating maximum security and at cancelling out contingencies. This pursuit is intimately related to datafication and risk management (Vaughan-Williams, 2010: 10). Yet, Vaughan-Williams' analytics allow him to see virtuality only where there is data and risk, foreclosing his view for the question how uncertainty is involved in bordering practices beyond risk. Moreover, while he observes a "temporal *thickness*" of borders (Vaughan-Williams, 2010: 7; emph. in orig.), a more detailed discussion of how this thickness is constituted is absent.

More recently, an interest in yet another approach to virtuality emerged at the margins of this discourse. Building on the works of Gilles Deleuze, the virtual is seen to constitute a distinct ontological realm. The ontological commitments of this 'virtual' reality are well captured by Der Derian who states that

"Constructing a de-territorialised sense of being—neither here nor there as being but always as becoming different – virtuality represents a paradoxical extra-reality that does not fit the dominant dyad of the social sciences, the real and the ideal" (Der Derian, 2001: 684).

Deleuze therefore goes beyond Baudrillard and Agamben. Notably, his take helps us to grasp the temporal implications of virtuality. While both, Baudrillard and Agamben stick to a chronological order of time, Deleuze argues that temporalities may actually overlap. Hence, Deleuze provides a good basis to think about the presence of the future at the border.

3.2.2 Deleuze's concept of virtuality

In contrast to Baudrillard, who conceives of the virtual as a hyperreal simulacrum (and the accompanying empirical focus on the world of algorithms, data streams and computer models) and Agamben who reads virtuality as the potential to be excluded and thus as a basis of sovereign power, Deleuze's understanding posits the virtual as something fully real. In other words, while Baudrillard understands the virtual as *hyperreal* and Agamben problematises the *potential reality* of the virtual, Deleuze argues that the virtual "is fully real in so far as it is virtual" (Deleuze, 1994: 208; cf. Lundborg, 2016a: 256). This means that the virtual occupies a distinct ontological terrain. Massumi describes this terrain as the "mode of reality implicated in the emergence of new potentials" whose "reality is the reality of change: the event" (Massumi, 1998: 16). For Deleuze, it is important not to confuse this realm of potentialities with mere possibilities, as the possible is opposed to the real.

A possibility is an exact image of reality, for all it lacks is the condition of existence (Deleuze, 1988: 97; Bergson, 2013: 41f). The possible does not change – except for becoming real – it does not become different, it is "already fully constituted, but exists in a state of limbo" (Lévy, 1998: 24). Aristotle uses the example of wine and vinegar to illustrate this point (cf. Bourassa, 2002; Dillon, 2003). Wine is not a possibility of vinegar. While wine can become warm, cold, etc., all these developments do not change wine's material substance – wine remains wine, and thus "the limits of substance are the limits of possibility" (Bourassa, 2002: 74). By turning into vinegar, wine crosses the threshold of its own substantial being and thus becomes different in itself. The first condition for something to be possible is thus that it remains itself. Possibilities are not *different* from their 'real' counterparts (Bourassa, 2002: 74). Instead, the real comes into being through a limitation of possibilities. In contrast, the virtual becomes actual through difference, and thus through creative processes (Deleuze, 1988: 96ff).

A second aspect that separates the virtual from the possible is *resemblance*, which also concerns existence as the axis of differentiation between virtuality and possibility. Discussing Bergson's critique of the possible, Deleuze contends that "the real is supposed to be in the image of the possible that it realizes" (Deleuze, 1988: 97) – it "simply has existence added to it" (Deleuze, 1988: 97). The problem with such an understanding of the relation between the possible and the real is that it essentialises 'reality' and cannot account for change. If reality comes into being through limitation – limiting which possibilities are *realised* – and resemblance – the possible resembling the real in every aspect except for existence – then instead of reality presupposing possibility, possibilities are dependent on the existence of a prior reality whom they resemble and whose existence they lack (Deleuze, 1988: 97; 1994: 212; Bourassa, 2002: 74): "If the real is said to resemble the possible, is this not the fact because the real was

expected to come about by its own means, to 'project backward' a fictitious image of it, and to claim that it was possible at any time, before it happened?" (Deleuze, 1988: 98). Thinking in terms of possibilities thus makes it difficult to account for change as it presupposes the identity of the concept wandering between possibility and reality. Moreover, if possibility only emerges after the fact, this challenges a linear understanding of temporality (see chapter 3.2.3).

In contrast to the reality/possibility pair then, Deleuze offers us a way to think about the ontological question of how something comes into existence through the concept of virtuality. Virtuality is different from possibility as its foci lie on difference instead of sameness as well as on disjunction instead of resemblance (Bourassa, 2002: 74):

"the characteristic of virtuality is to exist in such a way that it is actualized by being differentiated and is forced to differentiate itself, to create its lines of differentiation in order to be actualized" (Deleuze, 1988: 97).

As we already saw above, the movement from the virtual to the actual – actualisation – is a creative process through which the virtual becomes different within itself, thereby turning into an actual state. Deleuze states that

"For a potential or virtual object, to be actualised is to create divergent lines which correspond to - without resembling - a virtual multiplicity. The virtual possesses the reality of a task to be performed or a problem to be solved: it is the problem which orientates, conditions and engenders solutions, but these do not resemble the conditions of the problem" (Deleuze, 1994: 212).

Therefore, the virtual is also *real*, as a problematique offering its own solvability (without determining its direction), and thereby evoking a dynamic force of creation which is described in the idea of actualisation (Arnoldi, 2004: 34; Dillon, 2003: 547; Bourassa, 2002: 74f; Lévy, 1998: 24). If the virtual represents a problematic, potential realm of reality then processes of actualisation seek to resolve this problematic complex (Bourassa, 2002: 74; Dillon, 2003: 547; Der Derian, 2000: 785; Arnoldi, 2004: 34).

Pierre Lévy (1998: 23) illustrates the relation of the virtual and the actual through the relation between a seed and a tree: while the tree emerges out of the seed, actualises itself as a movement from seed to tree, it is not the reality of neither the seed nor the tree that is in question here. What is instead crucial is that the tree is already virtually present in the seed. While again, this virtual presence of the tree is not to be confused with full determination – after all the growing of the tree depends on ecological factors such as the presence and direction of a source of illumination, the quality of the soil on which it grows and the availability of water and nutrients – it still provides some tendencies of the tree's future emergence. This hints at the relation that exists between questions of ontology and discussions of the virtual. While both the virtual and the actual are real in the sense that they can be understood as beings in the world, it is their

being that transforms and that becomes different within itself in the process of emergence or becoming.

An important question for the studies of borders and border security that is raised through the idea of virtuality is how the virtual realm of the border is actualised and how practices involved in the actualisation of the border unfold. As virtuality motivates the idea of becoming different as a central aspect of reality, it also questions anticipatory knowledge such as risk that tries to extrapolate the future by assuming repetitions of past events. Instead, virtuality imposes the question how the radically new and different is accounted for in (border) security practices. Another directly related question concerns temporality. Building on the problem of retrospective possibility, it would be narrowly considered to understand the future as a realm of possibilities. Instead, it may be more useful to understand the future in terms of virtuality. In turn, as Deleuze conceptualises the virtual as an aspect of reality the question becomes how we can understand the reality or, in other words, the *presence* of the future and its effects.

3.2.3 Temporality: virtual and actual

Following Kimberley Hutchings (2008), temporality, as politically mediated time, is "essentially contested, rather than being tied to a singular [...] definition" (Hutchings, 2008: 4; cf. also Lundborg, 2016b: 263). Therefore, rather than searching for an uncontested definition of temporality to base this thesis on, the aim of this section is to lay out an approach to temporality that understands the presence of the future in terms of the virtual and as part of the non-sequential temporality of duration as proposed by Henri Bergson and taken up by Gilles Deleuze, amongst others. Following this conceptualisation of futurity, I approach the political stakes invested in invocations of the future in security practices and the specific importance of virtuality and the presence of the future in bordering practices.

Future presents

Niklas Luhmann's (1998) distinction between present futures and future presents offers a good starting point for discussing the temporality of security. A future present denotes a situation that will have happened. This means that, judging from the standpoint of the present moment, a future present contains the same qualities as this present moment in terms of being a specified point in the linear procession of time "that will always be exactly what they will be and never otherwise" (Luhmann, 1998: 70). Future presents are rendered intelligible through a *chronotic* temporal register, in the sense that, as they realise, it will be possible to understand them within a system of quantitatively measurable temporal units and it will be possible to assign a specific spot in a calendar or a specific angle between two watch hands to a future present: "*Chronotic* time renders life manageable, by providing a background frame in relation to which we can measure phenomena" (Hutchings, 2008: 5f; emph. in orig.).

Yet, especially with regards to manageability, a problem emerges with regards to the future. We can only be certain about a future present *as it realises*. Put differently, as long as a future present has not realised, uncertainty about it necessarily prevails since it "can always turn out otherwise" (Luhmann, 1998: 70; cf. Samimian-Darash, 2013: 3). This is simply because, understood within the register of *chronos* to which future presents belong, the future lacks ontological existence (cf. Hong/Szpunar, 2019: 1). Luhmann's chronotic future present therefore belongs to the realm of the possible, which is "typically attached to the form or image of a 'not yet' realized but still realizable representation" (Debrix/Barder, 2012: 71). Future presents thus fall into the same trap which Deleuze discusses regarding possibility and reality: The possibility of the future present can only be assigned retroactively, and only from the standpoint of that future present can it be said to have been possible. Making a similar point, Hutchings argues that

"the thinking of past, present and future as a succession of actual presents depends on the 'untimely' possibility of a future that precedes (and therefore a past that succeeds) any such present: the present is never synchronic but always anachronic" (Hutchings, 2008: 67).

Paradoxically, it is only *after* a present has actualised that it can become a past, and it is *before* a present's actualisation that that same moment is understood to be a future. Deleuze argues that "[t]he past [...] seems to be caught between two presents: the old present that it once was and the actual present in relation to which it is now past" (Deleuze, 1988: 58). Instead of succeeding one another, past and present are contemporaneous, "[t]he past does not follow the present, but on the contrary, is presupposed by it as the pure condition without which it would not pass" (Deleuze, 1988: 59).

Disturbing the linear causality implied by *chronos*, as a temporal sequence of cause and effect on which explanation hinges (Hutchings, 2008: 6), this paradox informs the ontological basis of a chronotic reading of time. Therefore, understanding time as a synchronic succession risks repeating "a set of assumptions about linear temporality; specifically that the future is a blank separate from the present or that the future is a telos towards which the present is heading" (Anderson, 2010: 778).

Present futures

In contrast to a chronotic understanding of time, *kairos* refers to a "a transformational time of action" (Hutchings, 2008: 5) that can potentially interrupt the continuous flow of *chronos*. *Kairos* is "a creative force in its own right, intervening in relation to objects and events, rather than operating as a neutral medium" (Hutchings, 2008: 25; cf. also Patton, 1997: no pagination). While qualitatively distinct planes, *chronos* and *kairos* are not mutually exclusive and may

interact in specific problematisations of temporality (Anderson, 2010). This is also the case regarding security practices, notably when they embrace anticipatory elements.

Having established how future presents denote a chronotic understanding of time, Luhmann's complementary notion of present futures engages with an uncertain "future horizon" (Luhmann, 1998: 70) that emerges from (present) conceptualisations of the future as a realm of (im-)probability. Taming this realm of uncertainty is fundamental to many conceptions of politics and illustrates the interaction of *chronos* and *kairos*, since controlling *chronos* through "creating a different kind of time through the powers of *kairos*" (Hutchings, 2008: 154; emph. in orig; cf. also Dillon, 2008: 313) is central to political action. But what quality do present futures have and what kind of (ontological) space do they occupy? Bergson's conception of *duration* can help to grasp this problem.

Bergson develops his notion of duration from re-thinking how memories are assembled and how they affect the possibility for action. He argues that memories depend on a sheet of past from which a present reaction is actualised (Bergson, 2013:102f; Connolly, 2002: 97). According to this idea, action in the present fundamentally depends upon a (virtual) association of memories as the potential for a creative unfolding of the present (cf. Braidotti, 2019: 31; Hutchings, 2008: 57). Memories are virtual in the sense that they are constituted by a set of differing contents, yet, they also form the point of departure for recollections (Connolly, 2002: 97). While memories, as virtualities, do not determine how the future unfolds, they nevertheless organise "experience in the interest of potential modes of action" (Connolly, 2005: 98). Anticipation is thus a guiding element of action. Only if we understand the present's indebtedness to the future can we understand its unfolding:

"[E]xperience itself – during those moments when you suspend action and are acutely sensitive to its flow – discloses a flux in which elements of the past flow into the present and both of those fold into future anticipation. Without anticipation, in which elements in the protraction of the present are lured by future possibilities, experience would be dead" (Connolly, 2011: 33).

In contrast to a spatialised understanding of time, as apparent in the notion of *chronos* in which time can be broken down into indefinitely divisible yet distinct units, duration "draws attention to how anterior moments endure in present ones", rendering duration a space of "the continuous, always incomplete, emergence of novelty" (Hutchings, 2008: 57; cf. also May, 2005: 42). Memories are a critical example where a spatialised understanding of time is limited, since they connect past emotions to current feelings and allow for the overlapping of anticipation, present emotions and memories of the past. At the same time, memory has the potential to give a twist to present decisions, it may bring us to reconsider a thought in light of something of the past.

we recollect which in turn provides for the opportunity of an altered future (Connolly, 2005: 101f).

The virtual past – in the form of memories – "is there; it is not nothing" (May, 2005: 47); it is real but not actual (Deleuze, 1994: 208). As different layers of memory start to interact and are being – implicitly or explicitly – referred to an actual situation so as to order its contents, duration emerges as a non-chronotic form of temporality that merges past, present and future; "[t]he assembled sheet is virtual and nonchronological" (Connolly, 2002: 97) which means that it integrates the multiplicity of potentials and combines it with an indifference towards a chronotic flow of time. The virtual sheet of past builds on overlapping temporalities: "Duration is the flow of time as becoming. It is waves of memory protracted into a present unfolding toward an altered future" (Connolly, 2005: 102). It must therefore be noted that the above discussion on virtuality is explicitly related to temporality. If virtuality is held to be real and potential at the same time, this argument relies on a reading of temporality as duration. Duration enables future potentialities to become the basis for present actualisations.

Duration ends up expressing itself in the form of events, that is, specific constellations of memories that enable action:

"The event is not a state of affairs. It is actualized in a state of affairs [...] but it has a shadowy and secret part that is continually subtracted from or added to its actualization: in contrast with a state of affairs, it neither begins nor ends but has gained or kept the infinite movement to which it gives consistency. It is the virtual that is distinct from the actual, but a virtual that is no longer chaotic, that has become consistent [...] – it is a virtual that is real without being actual, ideal without being abstract" (Deleuze/Guattari, 1991: 156; cf. also Debrix/Barder, 2012: 72).

The event thus brings order to virtuality, yet it also does not fully reduce virtuality to a single actualisation. It rather brings into being the potential of specific constellations, whereby the event emerges as "a synthesis of past and future" (Badiou, 2007: 38). Instead of stopping movement and freezing moving images the event "exposes the unity of passage which fuses the one-just-after and the one-just-before" (Badiou, 2007: 38). The event, although actualising, exceeds the present moment and integrates duration, as it remains attached to both past and future. An event is thus a becoming that depends on integrating a contemporaneity of past and future (Deleuze, 1990: 2). Relating back to our earlier reading of virtuality as a problematic complex, the event is what lies where problems and solutions meet:

"Deleuze understands [the event] along the lines of the relation between a problem and its solution: events are 'problematic and problematizing'. By 'problem', he means a virtual structure whose nature is never entirely captured in any given specification or determination of its conditions" (Patton, 1997: no pagination). The event challenges a chronotic notion of temporality which assumes that past, present and future are separate (Deleuze, 1990: 2; Connolly, 2005: 99; cf. also Lundborg, 2012: 3). Rather than mere rejection, it also offers us a way to think about temporality in non-chronotic terms, as what we are confronted with resembles a "continuous present which never fully coincides with a spatio-temporally saturated 'now', but goes on becoming" (Braidotti, 2019: 38). The temporality of events is thus closer to *kairos* than to *chronos*, in the sense of "a time of tension or conflict, a time of crisis at which the course of events poses a problem which must be resolved" (Patton, 1997: no pagination; cf. also Hutchings, 2008: 5).

What the pair of virtuality and actuality points to is the overlapping of temporalities through what Bergson and Deleuze refer to as duration. Duration expresses a non-chronotic temporality that builds on the contemporaneity of past, present and future in the form of memories. Memories – which can be understood as events as they bridge the virtual and the actual and bring order to a realm of potentials - form the basis of duration. They thereby form the basis for action as they order perception informing it with potential futures and processed pasts. Events can be viewed as units that capture the becoming of time. However, it is problematic to understand memories as solely informing a present, chronotic moment. Instead, memories depend on the virtual potential of overlapping, co-present futures. The motion between virtuality and actuality is thus a confrontation of "the relative movement between a completely open system of organisation (the virtual half) and the most regimented forms of government (the actual half)" (Lenco, 2014: 134). This does not imply that virtuality may not itself become a field of of governmental intervention. Indeed, as Tom Lundborg puts it, we need to consider "how the paradoxes and movements of the pure event appear to have been *captured*" (Lundborg, 2012: 62; emph. in orig.). Capturing virtuality becomes crucial in order to confront uncertainty – the stuff of mutually overlapping future potentials - and to produce a sense of "unease" (Bigo, 2002: 79).

It is now possible to substantiate my earlier considerations on the vector of in-betweenness of the border through the notion of duration. The temporal in-betweenness of borders stems, amongst others, from bordering practices that problematise 'the future' (the coming threats that challenge that which the border is supposed to protect) as a virtuality, that is, as an open realm of potential. Problematising then takes the form of creating events that bridge the gap between past, present, and future, thus by rendering future potentials present. These events contribute to the temporal thickness of borders (Vaughan-Williams, 2010: 7). For the operation of security, this means that an ontology of emergence and pre-emption in which the virtual potential of the world is the final source of insecurity is combined with a premediative epistemology of security, through which virtualities are creatively mapped and rendered present. Instead of calculating uncertainty, as present in technologies of risk, mapping virtualities works by embracing uncertainty and working through it. The next section deals with this interrelation of ontological and epistemological features in the operation of 'virtual security'.

3.3 Virtual security

In the light of the above discussion of virtuality and its associated durational temporality, what does it mean to talk of a presence of the future and how does this presence manifest itself in security practices, particularly in bordering practices?

3.3.1 The ontology of emergence and pre-emption

Pre-emptive security practices shift the problematisation of security towards virtuality. Following Massumi (2005, 2015), pre-emption does not rely on a linear causal logic but rather introduces a time-slip into security practices. Instead of responding to actualised dangers and their causes, the 'potential politics' of pre-emption relies on virtual causes. This is the case since preemption "converts a future, *virtual cause* directly into taking-actual-effect in the present" (Massumi, 2015: 15; emph. in orig.). Instead of responding to actualised threats, pre-emption tries to intervene at the virtual stage of emergence and potential. Capitalising on uncertainty and the unknowability of the future, pre-emption "incites its adversary to take emergent form. It then strives to become as proteiform as its ever-emergent adversary can be" (Massumi, 2015: 15).

The operation of pre-emption is quasi-causal, as the cause of action in the present is part of a hypothesised future. Threat, as the trigger of pre-emptive action does not rely on a substantive definition but rather on the temporal form of futurity (Massumi, 2005: 35). Threat is itself uncertainty, it is the emergent potential and the virtual reality of a devastating event. And in turn, only unknowability makes threat so threatening. The causality of pre-emption is

"bidirectional, operating immediately on both poles, in a kind of time-slip through which a futurity is made directly present in an effective expression that brings it into the present without it ceasing to be a futurity" (Massumi, 2005: 36).

The condition of the presence of the future lies in the fact that "the present is shadowed by a remaindered surplus of indeterminate potential for a next event running forward back to the future, self-renewing" (Massumi, 2002: 53). It is this shadowiness that an understanding of the virtual helps us to explore. Yet, the metaphor of shadowiness has its limits. Unable to permeate an object (in our case the future), the sunlight produces a copy, thereby presupposing the realised object. As Deleuze's explorations of the false problem of the possible hints at, the shadow of the object implies a readymade pre-existence of the object casting it. The future's presence, on the other hand, is unactualised virtuality, its diverse potential evades the clear contours of a shadow, aptly characterised by Der Derian as an "*interzone*" (Der Derian, 2001: 684; emph. in orig.). Understanding the future as un-real would, however, be too narrowly considered. As Lundborg argues,

"[t]he unfamiliar, just as the unthinkable and the unimaginable, should thus not be opposed to the improbable or unlikely. While expressing a pure potentiality, such phenomena must also be considered real; they are real in the sense that they could potentially happen" (Lundborg, 2012: 49).

Merging the epistemic qualities of the future, characterised by unknowability and uncertainty, with the ontological insight that the future, in its epistemic indeterminacy is nevertheless *real*, Lundborg highlights the mutual constitution of ontological and epistemological claims about the future. Similarly, Ben Anderson states that "we must understand the *presence* of the future, that is the ontological and epistemological status of 'what has not and may never happen'" (Anderson, 2010: 778; emph. in orig.). 'The future' is thus both, part of an epistemic construction and comprising ontological qualities.

Arguing for ontological qualities of futurity is different from accounts that conceive futurity as merely a discursive strategy. For example, Sun-ha Hong and Piotr M. Szpunar argue regarding anticipatory action that "[t]he future does not exist, in the sense that the event that prediction describes exists neither as a temporally displaced event nor as something that is actualized" (Hong/Szpunar, 2019: 7), thus not granting ontological existence to 'the future'. They understand their own reading of the future as an atemporal discursive strategy that legitimises security action (Hong/Szpunar, 2019: 8). In contrast, reading 'the future' through virtuality, the future *does* exist, however not in chronotic terms but instead on the grounds of a durational temporality. While it is certainly an important insight that invocations of the future ought to be understood as a specific kind of rhetoric action it is also reductive since it avoids the follow-up question forcing itself on the reader, namely what this future *is* if it refers to something that has not actualised. Readings of futurity that focus solely on epistemological and strategic questions lack an engagement with the ontological basis of such invocations.

Lundborg (2012: 62) argues that the paradoxical notion of becoming has been incorporated into the security rationalities developed around the historical event of 9/11, by embracing uncertainty and governing with instead of against uncertainty. What is at stake is thus not only an epistemic mode of how to apprehend reality. Rather, practices that emphasise the unknowability of the future also make an ontological assumption about reality that involves non-linearity and contingency instead of the continuity implied by the extrapolation of future risks on the grounds of past events. This means that "the problem exists at the level of what is to be known (it is not linear and law bound) rather than at the level of how we might know the underlying reality" (Chandler, 2014: 50). Pre-emption engages in ontological politics that enacts its object of knowledge – for instance futurity – as a particular kind of thing (Scheel, et al. 2019; Mol, 1999). The production of this object as a domain of reality is thus not reflective or representative but productive of a particular reality to be governed. A problematisation of security that emphasises complexity and contingency over linearity and law-boundedness builds on a virtual layer of potential difference for which preparation is due. Characterised by a desire of decision making in the face of uncertainty (Cooper, 2010: 173), security needs to counter the emergent and does so through mimicking its uncertain nature. Uncertainty is thus both, an epistemological and an ontological category, since it combines virtuality as a part of ontological reality and epistemic strategies to counter and correspond to this ontology (Massumi, 2015: 10).

The ontological (and temporal) commitment of security in practices that seek to anticipate the future therefore is with becoming and thus, virtuality, or what Melinda Cooper (2006) has characterised as emergence. Cooper has traced the genealogy of emergence back to mid-20th century microbiologist René Dubos who understood emergence as constant and limitless processes of evolution and counter-evolution. Evading a linear – and hence probabilistically extrapolatable - development, emergence is characterised by the "relentless, sometimes catastrophic upheaval of entire co-evolving ecologies; sudden field transitions that could never be predicted in linear terms from a single mutation" rather than the "gradual accumulation of local mutations" (Cooper, 2006: 116). Emergence withstands clear probabilistic extrapolations as it comprises sudden mutations within a full spectrum of virtual potential. Learning to "counter the unknowable, the virtual, the emergent" (Cooper, 2006: 117) requires us to become involved in the counterpart's becoming itself. Cooper thereby describes what the virtual object of preemptive practices that Massumi hints at consists of. It is emergence itself, a "threat whose actual occurrence remains irreducibly speculative, impossible to locate or predict" (Cooper, 2006: 124). This notion of emergence may be linked back to the Deleuzean idea of virtuality, since practices that try to counter the emergence of a threat act on becoming itself. It is

"the necessity of acting directly on the future and abolishing the processes in which events unfold and become actualized. [...] The virtual potentiality of the event must be acted upon immediately, before it has made the journey into an actualized state of affairs" (Lundborg, 2016a: 263; emph. in orig.).

Picking up the theme of emergence and relating it to biopolitics, Michael Dillon (2003, 2007, 2008) has explicitly pointed out how biopolitics appropriates the qualities of virtual potentialities. Following developments in the life sciences, life and the securing of life are bound to a survivalist logic, based on an understanding of life as an "emergent being" (Dillon, 2008: 310). Quoting the biologist Stuart Kauffman who argued that "[e]mergence and persistent creativity in the universe [...] is real" and thus "incalculable, non algorithmic, and outside our capacity to predict" (Kauffman, qtd. in Dillon, 2008: 313), Dillon concludes that

"[c]ontingency itself becomes a novel domain of calculability through which the taming of chance is integrally involved in a new game with time, since it is time itself, freed from transcendental goals and laws, that is the root cause of the contingent in the modern age" (Dillon, 2008: 313).

Biopolitics thus has to concentrate on the virtual rather than the actual, since it is the ontology of its own object – temporally emergent life – that is virtual. While actualised life presents us with an actualised state-of-affairs, security, in order to remain effective, needs to work on the emergent. It is neither the body, as in disciplinary practices, nor the collective population, but the very *becoming* of "bodies-in-formation" (Dillon, 2003: 538) that is to be secured. Therefore, what characterises life as the object of biopolitical modes of government is its constant becoming, shifting the logic of securing from "the mere securing of life as what is [...] to what life is always in the process of becoming" (Dillon, 2003: 537; cf. also Der Derian, 2000: 784). It is therefore precisely the virtual realm of potentials and potentiality that is problematised as "[c]ommanding, in turn, presupposes knowing. The question for a government of the future thus becomes how to deal with its contingency. An ontology of emergence that establishes uncertainty and constant change as the fundamentally given thus requires knowledge of contingency as a "complex discourse [...] about the knowledge of uncertainty" (Dillon, 2007: 45) in order to render emergence governable.

Emergence highlights the temporal character of being as becoming, and thus the durational character of being that continuously flees the fixation of present nows. Capturing its flows - securing - needs to cope with this dynamic character. Instead of acting upon actualities, it is the actualisation of virtuality that security tries to capture. While Lundborg argues that preemptive security aims at "abolishing the processes in which events unfold and become actualized" (Lundborg, 2016a: 263), I think it would be more accurate to argue that security, instead of merely preventing events from actualising, tries to act upon movements of actualisation themselves. Instead of dealing with actual events, virtual security hence produces knowledge about virtual potentials and engages itself in actualisations in order to capture virtuality and restrict it to particular governable forms. Virtual security in this sense is less about stopping or enclosing but rather about coping dynamically with actualisations. Referring back to Deleuze, if on the one hand actualisation is essentially a creative process in which something becomes different, and on the other hand, becoming is the fundamental ontological condition of being, security cannot possibly abolish the virtual/actual dynamic but would rather seek to engage with it in order to influence its tendencies. Certainly, my reading here is reminiscent of Foucault's discussion of apparatuses of security. Instead of stopping movement, Foucault argues that "security [...] tries to work within reality, by getting the components of reality to work in relation to each other" (Foucault, 2009: 69). Similarly, capturing virtuality and its actualisations (cf. Lundborg, 2016a: 263) does not imply stasis but rather comes in the form of appropriation (Reid, 2010: 412; Deleuze/Guattari, 1987: 385f). What we are dealing with is thus a dispositif of security that problematises the present through an *ontology of becoming* in which virtuality becomes a part of reality. Instead of acting on a referent object, its assumptions about the constitution of reality force the apparatus to capture movements and to foresee the unforeseeable, that which is yet to happen. Virtuality thus adds a durational dimension to dispositifs of security and enables us to grasp their temporal dimension (cf. Lenco, 2014: 135).

To sum up, it is possible to understand the ontology of biopolitical securing as one that aims at capturing the flows of becoming. Instead of securing a referent object – in our case the border – biopolitical securing assumes the constant emergence of new threats, problems and challenges. The object to be secured is problematised as a temporal and therefore transforming being whose contingent virtual potentiality is its core characteristic and makes up its problematic structure. An ontology of emergence thus helps us to reconsider what biopolitics means if we substantiate it by a virtual dimension of becoming. Expanding on this theme, the next section looks at the epistemological underpinnings of virtual security and the practices that render uncertainty governable.

3.3.2 Capturing emergence through an epistemology of uncertainty

Subscribing to an ontology of emergent threat, the central problem for government becomes how decisions may be taken under conditions of uncertainty. Discourses of pre-emption and emergence that stress a need to become involved in the conditions of emergence (Cooper, 2006) or that call for mimicking the enemy (Massumi, 2015) find their epistemic equivalent in attempts to creatively map spaces of virtuality through imaginative practices and premediation. Departing from risk calculation that implies calculability and assignation of probabilistically pinpointable cases on a risk continuum (Foucault, 2009: 60), the paradox operation of producing knowledge of uncertainty is rather "aesthetic, emotional and experiential" (Ericson/Doyle, 2004: 4f). However, it is problematic to subscribe to a binary logic of calculable risk and incalculable uncertainty (O'Malley, 2004: 14). Rather, I would argue that risk is one specific calculative rationality that tries to make sense of uncertainty.¹ That said, the probabilistic gaze of risk is but *one* way of "ordering reality" and a *specific* technique in the attempt and part of "diverse forms of calculative rationality for governing the conduct of individuals, collectivities and populations" (Dean, 2008:177).

Technologies of risk build on the probabilistic statements enabled on the grounds of the state-building "avalanche of printed numbers", as Ian Hacking has it (2002: 2). Against a similar historical background, Foucault (2009) develops his juxtaposition of normation and

¹ On a similar note, Louise Amoore (2014) has highlighted that the distinction between 'calculative risk' and 'imaginative premediation' is problematic since contemporary security practices deploy "a mathematical science that already enfolded the intuitive and inferential in its very objectivity" (Amoore, 2014: 436).

normalisation. He argues that in contrast to disciplinary practices, (biopolitical) security builds on the calculation of risks, inductively gathered from derivations in statistics of collective phenomena. As the aim of government becomes to "reduce the most unfavorable, deviant normalities in relation to the normal, general curve, to bring them in line with this normal, general curve" (Foucault, 2009: 62), normality becomes a part of reality. Instead of focussing on individual traits and fitting them to an external norm, "the particular details of each individual case [...] are submerged or stripped way, and only certain recurring characteristics attended to" (O'Malley, 2009: 5). Emerging from "an interplay of different normalities" (Foucault, 2009: 63), normalisation abandons the disciplinary norm and instead governs through risk and the certainty of inductively created distributions of cases. As a form of knowledge, risk and probability are based on accounts of extrapolating pasts in order to arrive at quantifiable estimates of the future.

Approaches that seek to know and govern through risk try to grasp 'known unknowns' instead of 'unknown unknowns' (Aradau/van Munster, 2011: 20). While both, risk *and* uncertainty approach the problem of a future present, they still differ epistemologically and ontologically in the way they create a presence of the future. While "[r]isk is an attempt to make the future calculable, uncertainty is a principle that stimulates thinking about the plausible or possible rather than the probable" (Aradau/van Munster, 2011: 21). Risk involves transforming future uncertainty into possibilities and deals with the question "whether one future possibility or another will be realized" (Samimian-Darash, 2013: 4). It works by introducing "an array of finite possibilities for the future" (Aradau/van Munster, 2011: 10). Conquering the future as a realm of 'known unknowns' assumes that, although the future in principle is an open virtuality that may actualise in manifold ways, it is possible to model regularities and probabilities. This calculation assumes an underlying directionality of the chronotical flow of time which can be captured through basically modelling its actualisation as the more or less probable repetition of past presents.

An ontology of emergence moves the epistemic perspective from risk to uncertainty. What is to be dealt with increasingly takes the form of a "risk beyond risks" (Ewald, 2002: 294) or, of 'unknown unknowns'. 'Unknown unknowns' are problematic since they "disturb existing, risk-based modalities of taming the unknown future" (Aradau/van Munster, 2011: 21). Acknowledging and countering the existence of 'unknown unknowns' epistemically requires a move from the possible uncertainty of risk calculation to potential uncertainty. Potential uncertainty "derives from the variety of actualities that can emerge from the virtual event and, thus, from a situation in which no known possibility is sufficient to counter it" (Samimian-Darash, 2013: 2). Again, this shows the complex interplay of uncertainty as both an ontological and an epistemological category, amounting to "a clear epistemological crisis inasmuch as

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ontologically emergent features cannot be reduced to knowable intrinsic causal capacities" (Evans, 2013: 74).

In contrast to probabilities, 'unknown unknowns' deal with non-quantifiable potentials, thereby also embodying a different relation to scientificity. The point of departure here is on the one hand the unavailability of scientific knowledge. This unavailability then installs a context of "doubt, suspicion, premonition, foreboding, challenge, mistrust, fear, and anxiety" (Ewald, 2002: 294). On the other hand, the lack of a sound knowledge basis itself becomes the prime driver for action. The proliferation of 'unknown unknowns' therefore has a dual implication for security thinking. Firstly, it implies that risk technologies are not sufficient to tame the future. This insight stems from a problematisation of the virtual character of the future. While the future imagined through technologies of risk is essentially a repetition of the past, virtuality focuses on the production of difference and the occurrence of novelty and the unexpected. Secondly, this problematisation of virtuality creates an imperative to explore new calculative regimes in order to deal with this 'new' kind of future:

"uncertain futures must be rendered thinkable, prepared for and preempted or mitigated [...] Thus one sees the development of multiple technologies of futurity, most of which seek to 'model' potential futures" (Lentzos/Rose, 2009: 236).

It is important to further distinguish between precaution and pre-emption. Precaution seeks to act on a threat before it reaches a point of irreversibility (Ewald, 2002: 287). It therefore still involves a sense of prediction, assuming the possibility of specifying a threat to secure oneself against. On the other hand, pre-emptive practices "are predicated on the fundamental non-calculability of future threats, which consequently require specific political technologies for governing phenomena that build precisely on their partial unpredictability" (Tazzioli, 2018b: 274). Elsewhere, technologies that render uncertainty governable have been referred to as 'premediation' (Grusin, 2004; de Goede, 2008). As a technique, premediation answers to the problem that "[o]ntological emergence cannot be neatly contained within systems of prediction" (Evans, 2013: 74). In contrast to prediction, premediation "is not necessarily about getting the future right as much as it is about trying to imagine or map out as many possible futures as could plausibly be imagined" (Grusin, 2004: 28). Against the background of the above theoretical discussions, it may be understood as a technique that maps virtuality, by relying upon the imagination of an event or threat that has the potential to disrupt the present. Pre-emptive practices that take action on the grounds of a virtual, future cause, presuppose practices of pre-mediation (de Goede, 2008: 162; Salter, 2008: 248). This is the case because without mapping the terrain of uncertainty, it would be impossible to detect emerging events before they actualise.

Through duration, it is possible to view the various imaginations at play *before* preemptive practices as the creation of *memories of the future*. A durational view of temporality points to the way in which action in the present depends on memories, forming a sheet of past that maps spaces of virtuality. While there is thus a sense of futurity implied in this sheet of past - after all it enables action in a present yet-to-come -, pre-emptive action gives another twist to that logic which I try to grasp through the notion of memories of the future. As premediated imaginations try "to imagine, harness and commodify the uncertain future" (de Goede, 2008: 159), they map a realm of potential. Mapping potentials via pre-mediation has become a widespread security technique in security practices after 9/11. Famously, the inability to "foresee and prevent the attacks" was seen as a "failure of imagination" (de Goede, 2008. 155). While risk calculation, as a probabilistic technique, builds on an extrapolation of past events into the future, pre-emption seeks modes of acting in the face of uncertainty (Ewald, 2002: 294; Cooper, 2010: 173). A durational view can add theoretical depth to the observation of premediative practices. On the one hand, the imagination of future events works on a virtual plane, it is "interested in the ways things could be, or could have been, modes of being that are rendered by the grammatical constructions of the conditional or the subjunctive" (Cooper, 2010: 174). It does not try to grasp actualised events but rather tries to imagine what is still a virtual potential and what may eventually actualise. Yet, "[p]reempting a memory is a memory" (Cunningham, 2014: 467; emph. in orig.). Therefore, on the other hand, the practice itself works by becoming a memory of the future and thereby a basis for action. We can understand this practice as an event in the sense of something that brings order to virtuality while it is also itself bound to a process of actualisation. The futurity it maps is itself involved in the actualisation of the virtual and thereby has the potential to change its course. To give an example, if stockpiling measures are taken in order to prepare for the potential of a future famine, these measures take part in the concrete actualisation of such a famine (for a more in-depth engagement with the temporality of stockpiling see Folkers, 2019). If a famine actualises at some future point, it will have different implications if stockpiling measures were taken in the past than if they would not have been taken. Pre-mediation thus works through creating memories of the future, thereby producing "a complex causal relationship between subjective expectation (propositions about contingent events and the degree of credibility we assign to them) and the actual creation of worlds, virtual or otherwise" (Cooper, 2010: 174). Instead of a sheet of past, pre-emptive practices colonise and capture the future by making it part of duration. Insinuating future memories, events that may happen and that potentially will-have-been form the basis of present action. A feared future simulated in the present as Kim Cunningham notes "is not a representation of what could be, but an action in the present, an action which produces its own memory" (Cunningham, 2014: 467). Creating a memory of the future thus takes the form of producing events. As established above, events are characterised by temporal ambiguity, merging the space between past, present and future yet also, on the other hand, speaking order to this ambiguity.

Creating durational events that embody a presence of the future then helps to deal with the problem of the future's unknowability in a creative way (Cooper, 2010: 181). Creating events helps security experts to bring a "future prospect [...] into the present as an object of knowledge and intervention" (Lakoff, 2008: 401) and thereby to expand the temporal thickness of borders (Vaughan-Williams, 2010: 7). The power of these events stems from their operation in the conditional world of a "future subjunctive" that forms the basis of "a claim over the future in all its unknowability – a claim over event worlds that have yet to actualize in space and time" (Cooper, 2010: 181). To be sure, this claim does not work through certainty, but precisely through uncertainty and contingency. Producing events in the form of memories of the future is thus one of the "governmental technologies of contingency" (Dillon, 2008: 309) in which the biopolitical discovery of contingency and emergence as characteristics of its object of governance finds correspondence.

Analytically, this insight involves moving away from the moments of decision and instead focussing on what happens before decision and what enables decision. As Jef Huysmans argues

"securitizing in contemporary world politics develops significantly through unspectacular processes of technologically driven surveillance, risk management and precautionary governance. These processes are less about declaring a territorialized enemy and threat of war than about dispersing techniques of administering uncertainty and 'mapping' dangers" (Huysmans, 2011: 375).

The exercise of mapping virtual potential becomes central for the government of uncertainty. Along Deleuzean lines, I understand these forms of knowledge as attempts to capture the actualisation of virtual potentials, the reality of the virtual as a potential in the present being at stake. Security has to deal with virtuality as the really existent potential inherent to futures to *become different*. Our reading of the dispositif of security may thus be expanded by a plane of virtuality. This dispositif then comprises certain rationalities, building, as discussed earlier, on a specific ontological conceptualisation of how the world *is*: complex, emergent and eventually unpredictable. The urgent need that arises from these assumptions – that must sound rather pessimistic from the point of view of security professionals whose fundamental aim it is to *make known* – is to find epistemic and practical solutions to this problem. If it is impossible to predict or probabilistically model the flows of time, then we need to become involved in its emergence itself, tapping and appropriating the non-linear temporality of virtuality. This takes the form of premediative practices that create memories of the future by making them present via practices that work through creative instead of probabilistic modelling, imagination rather than extrapolation and intuition rather than plain facts.

On the other hand, however, such a problematisations has further implications if we take Deleuze's analytical repertoire seriously. From this standpoint, we need to understand these mapping exercises themselves as actualisations and active, world-making approaches that create a presence of the future. Mapping thus both, problematises the actualisation of a particularly problematic form of virtuality, the potential of its catastrophic unfolding and thereby itself forms a specific actualisation by this attempt.

3.4 Subjunctive bordering and the border as a problem of virtuality

So far, I argued that when we see creative takes on the future, at a deeper level, this can be viewed as a problematisation of virtuality. The border is a crucial site to witness this problematisation since its imagination remains tied to ideas of sovereign power and moments of sovereign decision of inclusion and exclusion. The border forms the classical solution to the problem of sovereignty – even if it takes on biopolitical forms that, as Agamben (1998) and others argue, are merged within modern forms 'biopolitical sovereignty' in which decisions to exclude are not absent but guided through different rationalities (cf. Vaughan-Williams, 2009b: 734).

3.4.1 Sovereignty, borders, and the problem of a virtual future

Bordering could thus be viewed as a self-referential practice of performing and re-producing sovereignty through decision, actively shaping the future to come. However, as has been argued, the future is also thoroughly undecidable, open and diffused with potential; it is unknowable. Taking this challenge seriously at the border then questions the capacity of sovereign power to *make* the future via decision, asking what happens if the future turns out differently, and how to prepare for such a future. Put differently, conceiving the future as virtuality, as a realm of potential, urges border security experts to "engage with that which exceeds calculability" (Aradau et al. 2008: 150). This is different from biopolitical notions of risk which builds on the repetition of past events. Bordering practices that seek to render this unknowability of the future governable are thus an effect of a problematisation of virtuality, coincidentally countering its temporality (continuous birth of threat) and appropriating it for the future). Capitalising upon the virtuality of the border can thus be seen as an attempt of sovereignty to renew itself by actively creating a presence of the future.

Borders are tied up with both, sovereignty and security. The decision to include and to exclude, the function of the border as an instrument of status allocation, condensed to a moment of sovereign decision is certainly not absent from today's (European) border. Such a moment of decision performatively produces certainty. At its basis, we find a layer of knowledge about a person (often built upon group characteristics but also increasingly personalised) that is decided upon. Sovereignty therefore relies on the production of biopolitical knowledge, so as to

produce a population of mobile subjects through a range of technologies such as identity documents or migration statistics. At the same time, biopolitics changes the operation of borders, rendering them enabling instead of restricting instruments. Circulation, so the biopolitical problematisation of the border purports, is not a phenomenon to be repressed but one to be enabled and optimised. The border itself becomes a site of biopolitical knowledge production.

Ideal typically, borders thus express a transformation of smooth space into striated space: "over historical time, territorial spaces were gradually striated in order to transform the variability of the smooth into states conducive to more secure life cycles" (Reid, 2010: 411) as the "amorphousness of smooth spaces [...] proved hostile to the possibility of an ordered and more secure existence" (Reid, 2010: 411). Bordering tries to cope with and bring order to the non-predictability of mobilities. Striation then tries to steer the amorphousness of smooth space mobilities into orderly paths, not by eliminating them but rather through appropriation in a "process of capture of flows of all kinds, populations, commodities, or commerce, money or capital, etc." (Deleuze, qtd. in Reid, 2010: 412). In other words, and to bring the notion of smooth and striated space into dialogue with biopolitics, striating space tries to produce a secure equilibrium (Foucault, 2009: 69). This operation depends on appropriating the problematic aspects of mobility through bordering practices: "states have not destroyed smooth space but learnt how to utilise it, subordinating it to their own ends" (Deleuze, qtd. in Reid, 2010: 412). Acknowledging and attempting to appropriate the potentials inherent to smooth space thus also shifts its regulation from attempts to structure territory to an approach that seeks to become immersed with the becoming quality of life and circulations. Biopolitics is therefore also bound up with temporality and attempts to capture the future. As the accounts by Dillon (2003) and Cooper (2006) show, it is the ontological fact of becoming and emergence itself that biopolitics seeks to capture. Understanding the movement of emergence as part of a virtual realm of biopolitics highlights that the problem of the border is to be posed not only in *spatial* but also in temporal terms. In fact, it is impossible to neatly distinguish between both dimensions since the problematic of a changing space of bordering is itself infused with a temporal problematisation that points to this space's potential becoming-different and hence, becoming-dangerous.

As I have argued, biopolitics relies inherently on problematisations of the future. Following Foucault, this problematisation took the form of risk, of statistically extrapolating the repetition of past events. However, an approach that takes biopolitics seriously also needs to allow for this problematisation to change or to be expanded. What if the future – in the view of security professionals – becomes a concept that is hard to predict stochastically? What if what we find is not a future "conceived as an already known future, as a future perfect or a *futur antérieur*" (Bigo, 2014: 220; emph. in orig.) but a future eventually so instilled with potential of becoming different that it evades statistical extrapolation? To be sure, we would still, as Bigo argues with regards to the expertise generated in the professional universe of smart border security technicians, "need critical perspectives that question the truth claims of this universe of expertise" (Bigo, 2014: 220). Yet, truth claims regarding virtuality may come close to professional confessions of ignorance and searches for strategies to cope with this ignorance.² It is thus not only space which is striated or smooth, but also time. While risk tries to order time by assigning degrees of future danger, smooth time as "continuous variation" (Deleuze, qtd. in Reid, 2010: 411) finds itself to be radically open.

Analytically, looking at how biopolitics and sovereignty intersect in bordering practices highlights how sovereign decisions rely upon various predicaments. There are thus "plural forces of authorization" (Amoore, 2013: 14) that set the stage for what may later appear as a sovereign decision at the border. The neat moments identified through the lenses of sovereignty are actually "assemblages that emerge from the interactions of border guards, procedures, detection devices, sniffer dogs, environmental conditions, screens and readings, suspicions, mobilities, imaginations, and experiences" (Bourne et al. 2015: 310).

Regarding bordering practices, explorations into the predicaments of sovereign decisions have mainly highlighted the importance of risk calculus. Yet, if "[t]he sovereign order is no longer simply that of decision, but also that of imagination" (Aradau et al. 2008: 152) this also implies going beyond risk. This, I argue, stems from the fact that risk on the one hand and more imaginative practices on the other conceive of 'the future' as a different kind of thing. While risk views the future as a repetition of the past, practices that highlight the need of a more creative take on the future tend to problematise it not as a more or less likely repetition of past events but instead a virtuality in which the potential of the future to *become different* is at stake, thus breaking the mould of risk calculus and opening bordering to the unfolding of the emergent rather than the repetition of the past.

3.4.2 Subjunctive bordering and the dispositif of virtuality

As soon as bordering practices problematise their own inability to know the future for sure, as soon as they review the calculative regime of risk as incomplete and hence as soon as they seek to find ways out of an ontologically grounded admission of (partial) ignorance, that is, as soon as they are motivated by doubt itself, a strategic need to restore knowledge in the light of fundamental uncertainty emerges. Managing their own self-reflexive unease of uncertainty becomes a task confronting Bigo's (2002) managers of unease. Since securing, as the basic task of border professionals, consists in making known, rendering visible and hence governable through diverse forms of calculation, managing uncertainty becomes a central task. This is

² I do not want to subscribe to a pejorative understanding of ignorance but rather to its original meaning as non-knowledge (cf. Daase/Kessler, 2007).

crucial with regards to bordering practices, since what is at stake, tied to the imagination of sovereignty and borders, is the ability to be a subject of international relations as such. With regards to the European Union particularly, securing external borders is politically tied to the survival of free movement and the single market, the central project within the EU (van Hou-tum/Pijpers, 2007; Buckel, 2013). What emerges is thus an urgent need, out of both, the old fantasies of sovereignty and the new problematisations of uncertainty, to act in the face of the unknown by creating a presence of the future. In other words, as soon as the future is problematised as a virtuality this entails a double movement of need and opportunity for action. Analytically, these intersecting movements can be well captured in the Foucauldian notion of a *dispositif*, expanded by a virtual/actual axis (Lenco, 2014: 135), which will form the basis of my own analytical take on the empirical material through which I try to illustrate the respective bordering practices. These practices are subjunctive rather than stochastic (cf. Cooper, 2010: 174). While a dispositif of virtuality still works on the fundamental biopolitical premise of optimising good forms of circulation while cancelling out its bad forms, it departs from risk and its conceptualisation of the future.

As Claudia Aradau and Rens van Munster (2007: 97) argue, dispositifs can be understood via *rationalities* and *technologies*. As "ways of thinking about a social problem that will make its management practicable" (Aradau/van Munster, 2007: 97), rationalities concern the discursive level of the "heterogeneous ensemble" (Foucault, 1980b: 194) of the dispositif. Rationalities aim at rendering "reality thinkable in such a way that it is amenable to political deliberations" (Miller/Rose, 2008: 59). To arrive at this aim, rationalities assemble moral forms, epistemological and ontological assumptions and idiomatic regularities (Miller/Rose, 2008: 58f). An aspect that may be added to this take on the dispositif is the question what an apparatus answers to, as it "has as its major function at a given historical moment that of responding to an *urgent need*" through which Foucault ascribes to it "a dominant strategic function" (Foucault, 1980b: 195; emph. in orig.).

Technologies, on the other hand, concern "the means of realization of rationalities, the social practices which are aimed at manipulating the social and physical world according to identifiable routines" (Aradau/van Munster, 2007: 97), they refer to the "unsaid" (Foucault, 1980b: 97) elements of the dispositif.³ Analytically, highlighting the role of technologies

³ Here, Foucault (1980b: 194f) may be read as distinguishing rather sharply between the said and the unsaid and between discursive and non-discursive elements. I think reading him more favourably through notions of performativity as developed in feminist literatures can highlight that it is not possible to neatly distinguish between discourses and practices. While "[m]ost discourse analysis has an epistemological and methodological focus on written or spoken language [...] in principle language need not be verbal" (Hansen, 2006: 23). Instead, discourses and practices are related and express each other: "performativity must be understood not as a singular or deliberate 'act', but, rather, as the reiterative and citational practice by which discourse produces the effects that it names" (Butler, 1993: 2).

implies going beyond grand narratives and instead focussing on the more basic, mundane and routine operations of power. Technologies "seek to translate thought into the domain of reality, and to establish 'in the world of persons and things' spaces and devices for acting upon those entities of which they dream and scheme" (Miller/Rose, 2008: 32). Through rationalities and technologies, dispositifs express and answer to specific problematisations (Rabinow, 2003: 55; Walters, 2016: 810).

In my reading, subjunctive bordering builds on a dispositif of virtuality that may be characterised in the following way. In terms of *rationalities*, the dispositif builds on an ontology of emergence and becoming, and a corresponding notion of fundamental uncertainty. The urgent need emerging from this insight consists of attempts to produce knowledge of phenomena conceived as unknowable. Resolving this paradox is a matter of applying specific governmental technologies that try to map virtuality thereby creating a presence of the future. This takes the form of creating events – memories of the future – through creative practices. These events bridge the gap between present and future. Moreover, such practices that map virtuality inevitably become involved in actualisations themselves. By forming a basis for action, they inform border security professionals in the absence of sound knowledge of a situation. In analytical terms, the presence of the future that is created through the mapping practices that I seek to explore in the subsequent empirical observations, builds on a durational temporality that ignores the chronotic non-existence of the future and instead kairotically appropriates its openness through creative practices. 'Creativity' is to be taken literally in this context, as what is created are memories of the future. In the absence of actual events (cf. Lakoff, 2008: 401), it is their virtual incarnation that gains presence and actualises through insinuating the possibility of taking actions on the grounds of events that may never happen.

3.4.3 Methodological remarks and material

For the empirical part, some methodological guidelines as well as a disclosure of the concrete methods of analysis through which I approach my research question are due.⁴ In general terms, I try to identify patterns of discourses and practices, building on a reading of dispositifs as comprising rationalities and technologies. These patterns are identified via reading and viewing material through guiding questions, building on the in-depth theoretical discussions of chapters two and three (the concrete choice of material will be discussed in more detail below). I chose the period from 2005 to 2019 as my period of investigation. This period came about since Frontex, as the central agency taking over border management duties on a European level was founded in 2005. As Frontex has a coordinative function and in line with the literature, I identified it as the central actor in the European border regime in terms of providing guidelines and

⁴ This approach to the empirical material in large parts builds on the suggestions by Bonditti et al. (2015).

basic rationales for bordering practices more generally (Neal, 2009; Léonard, 2010), even though it must be noted that Frontex is part of a larger ecosystem of agencies in the EU involved in bordering practices (cf. Kasparek/Tsianos, 2012). While Frontex provides a range of programmatic and technical documents, I decided to expand the corpus of initial documents by videos of the annual '*European Border and Coast Guard Day*' (EBCGD) event, available on the EBCGD website (EBCGD, 2020). Organised by Frontex annually since 2010, the EBCGD invites experts to talk about recent developments in bordering as well as best practices and aims at providing "a forum for topical discussion, exchange of views between key border-management players, and a platform to bring together the worlds of public service and private industry" (EBCGD, 2020). The videos available are mainly panel discussions as well as presentations by single speakers and seminar sessions. The video documentation of the EBCGD proofed to be highly useful since it provides a glimpse into the professional activities of border personnel.

What I am interested in are the imaginations of the future in the realms of EU security professionals working on border security, particularly those futures that are understood to be ungraspable by the calculative regime of risk. Following Foucault (1988), I understand these imaginations as *problematisations* (see chapter 2.2.1), since they express the particular problem of unknowability of the future. Such problematisations then involve rationalities that render this 'reality' graspable. Building on my earlier reading of rationalities, guiding questions with regards to my interest can be identified (see Table 1 below)

On the other hand, I argued that technologies involve the concrete translation of rationalities into concrete actions and practices. Here, an MA thesis does not provide the adequate financial and temporal and thus pragmatic framework for in-depth ethnographic research. Therefore, I rely on a second-best approach, using practical guidelines for border security personnel that are publicly available as well as descriptions of border personnel made in public events that are available through videos to understand practices⁵. Again, my exploration of technologies is theoretically guided by several guiding questions (see Table 1 below).

In terms of material in the end I analysed a total of twenty-eight documents and six videos, initially starting out from a lower number and then being guided by references made in documents as well as by panellists that cited other material. As noted above, my starting points were documents by Frontex as well as EBCG Day videos of panel debates, single speaker presentations and seminar sessions. The documents and videos that I started with had to fulfil four initial criteria: they had to be (1) published by Frontex or through the EBCGD website, which means that as such they had to be (2) publicly available. Further, they had to (3) fit into

⁵ I am aware that relying on practical guidelines of practices holds the danger of conflating actual practices with an institution's production of a public image. Given the practical constraints of this thesis and its explorative character, I think it is still worthwhile to approach practices via these documents and video material.

the period of investigation (2005-2019), while a fourth criterium concerns (4) that documents that entered the initial corpus had to be compatible in terms of content with my research question.

Analytical dimension	Guiding questions
Rationalities of government "ways of thinking about a so- cial problem that will make its management practicable" (Aradau/van Munster, 2007: 97) "[The dispositif] has as its major function at a given his- torical moment that of re- sponding to an urgent need" (Foucault, 1980b: 195)	 What forms do articulations of the future take? (menacing catastrophe, continuity, probabilistic risk, newness vs. continuity) What different ontological takes on the future can be found? Can we find problematisations of risk and if so, how do they correspond to different ontological takes on the future? How is the future assessed epistemically? What kind of future is constructed? What reactions are proposed for the problem of the future?
Technologies of government "the means of realization of rationalities, the social prac- tices which are aimed at ma- nipulating the social and physical world according to identifiable routines" (Ara- dau/van Munster, 2007: 97)	 What practices are linked to problematisations of the future? What actions in the 'present' do specific 'futures' require? How is knowledge rendered actionable and by what means?

Table 1: Guiding questions for the dispositif analysis

While it is difficult to give 'hard' criteria for such a compatibility, my approach was to screen documents through investigating the general topic of the document and through targeted keyword-searches⁶. References made in these sources, enabled me to sample further documents. For the documents that were sampled through these references, the criteria ceased to apply. This was the case because referenced documents such as more basic academic literatures cited may well have been published *before* the period of investigation yet *inform* that period. The

⁶ Keywords included 'future', 'risk', 'uncertainty', 'creativity', 'contingency', 'preparedness', 'scenario', 'unexpected', 'unforseen' (as well as the respective adjectivised forms of the nouns).

relatedness in terms of content, even if documents did not explicitly relate to bordering practices, here resulted from the reference being made to these documents in other documents that fulfilled this initial criterium. The endpoint of analysis stems from theoretical saturation, that is, I stopped analysis as no new information occurred empirically.

After clarifying my methodological approach and the way in which I conducted my empirical analysis, I want to quickly address a problem related to attempts to study the virtual. Given the preceding set of characteristics which now stand as the thesis' take on virtuality the problems that obviously emerge are numerous: How to study tendencies? How to know a potential unless it already actualised? How to study something its virtual form if gaining that form is precisely the transition from the virtual to the actual? How to avoid formalising that which has "no proper form of its own" (Massumi, 2014: 56)? These (and other) questions are utterly justified and constitute a basic tension in my perspective. In the end, I can only study what has actualised, and, given the fact that resemblance is a feature of the possibility/reality relation but is explicitly absent in the virtuality/actuality pair, inferring from what has actualised to what could have been virtual tendencies seems logically flawed. I therefore do not claim that I study virtuality in any pure form because from the preceding remarks it becomes clear that the virtual is precisely what evades sound observation. However, I think it is possible to circumvent this problem through a change of perspective. Indeed, while I would maintain that studying the virtual faces one with huge challenges, it is precisely this challenge which constructions of the future respond to, as they represent "forms of knowledge that render this virtuality knowable" (Arnoldi, 2004: 33). As soon as knowledge reaches for the future and problematises it in terms of its manifold potential unfoldings, what is at stake is precisely the virtual. Therefore, I think my analytical toolbox enables me to grasp how virtuality becomes a problem at the border and how this problem is dealt with.

It is also important to state the reflexivity of my take on virtuality and problematisation and to make my own position transparent. With regards to virtuality, I argued that we can conceptualise a specific set of problematisations of the future by security professionals concerning the future's virtual ontology. Virtuality here is thus an analytical term that describes two distinct areas. On the one hand, it stands for an emerging rationality of bordering that conceptualises the problem of the future as a realm of potentiality. Beyond that, however, it is also analytical in the sense that it forces the analyst to situate such practices in the interplay of virtuality and actuality as two sides of the coin of reality. In other words, virtuality, albeit on different levels, informs *both* security professionals at the border (which is my argument) *and* my own ontological assumptions and subsequently my analytical take on the world, thus constituting my metatheoretical approach. Regarding problematisation, while I stated earlier that I see problematisations as practices that construct the border as a particular kind of thing, rendering it an object of knowledge, as an analyst I do not stand apart from such a problematisation. Instead, problematisation "designates both the critical mode of activity [...] and its object of study" (Bonditti et al. 2015: 171). Problematisation as an object of study therefore goes hand in hand with becoming reflexively bound up with this object and engaging in a perpetuation of its problematisation.

4. Exploring the EUropean Border: Between Virtuality and Actuality

"But let me break the ice, put a simple question to our panellists: where will the next emergency come from?" [laughter] (EBCGD, 2013b)

When the panel discussion on 'Border control in times of crisis' touches on the topic of (un-)predictability, the audience and the panellists react with laughter. There is a sense of discomfort underlying this reaction, as everyone in the room seems to know that it is not possible to give a certain answer to the provocative initial question. Translating the room's atmosphere, Ilkka Laitinen, then Director of Frontex, answers that "the most important thing to notice is that we are living among perhaps the highest level of uncertainty, there are many known uncertainties and there are a number of unknown uncertainties" (EBCGD, 2013b). If it is true that humans were "compelled to invent laughter" (Nietzsche, qtd. in Lippitt, 1992: 44) to cope with their own suffering, we may read the room's humorous unease as a sign of helplessness on the part of border security professionals as they are confronted with the future's nebulous and unpredictable qualities. Eventually, it is the "unanswerableness" of the question that provokes the audience's reaction, a "human way of responding to a situation which is essentially 'unmanageable' by other means" (Ördén, 2018: 24; cf. also Hentschel/Krasmann, 2018: 7).

Yet, unanswerableness does not sit well with security professionals. The empirical part of this thesis therefore explores various ways in which bordering practices seek to confront this problem. My analysis suggests that (1) it is possible to observe a problematisation of risk and its take on futurity that emphasises the potential of the unexpected event instead of the repetition of the past; (2) that this rationality is translated into concrete, routinised technologies that seek to capitalise upon imagination instead of calculation and thus adhere to a subjunctive logic; and that (3) the combination of a rationality pointing to the virtual character of futurity and technologies reproducing this rationality leads to a refocussing on the present *situation* and action in the here and now.

4.1 The paucity of risk analysis and the problematisation of the future

As an episode, the encounter on the panel of the EBCGD illustrates a wider problematisation of the future that is apparent throughout the analysed material. In the realms of EU border security, problematisations of futurity meander between, on the one hand, the *repetition of the past* and, on the other hand, the formation of a *kairotic hypothesis*. With this I mean a problematisation of futurity that views it as the potential for a time of crisis for which preparedness is due.

4.1.1 Risk analysis and repetitions of the past

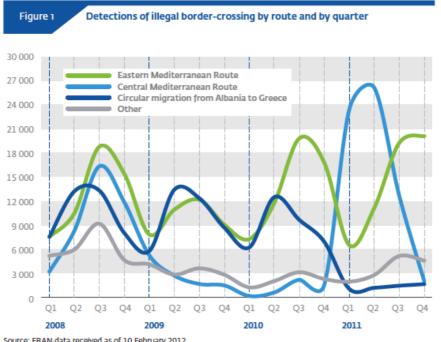
Most importantly, capturing futurity works through the concepts of *trends*, which is a central term in Frontex' Annual Risk Analysis Reports (ARAs)⁷. Trends are patterns of past incidents that are representable and pinpointable on a linear timeline. Their degrees of freedom are two-fold, consisting in increase or decrease, furthermore they may be stable or unstable (Frontex, 2012c: 13). They remain understandable as continuous phenomena and as quantitative listings of past occurrences. Trends are based on a set of statistics including detections of illegal border-crossing, refusals of entry, detections of illegal stay, asylum applications, detections of facilitators, detections of forged documents and return decisions and effective returns.

Presentations of trends regularly take the form of graphs (cf. Fig. 2 below). As Latour argues, such visual tools allow us to "think with our eyes and hands" (Latour, 1986: 1) and therefore represent an important translation of abstract numbers. The example above also illustrates how the trend as a tool enables the striation of time into orderly past moments and series of single events. The designation of quarter years and the spatial order through the ascription of routes contributes to striation.

Regularly, maps combine depictions of quantitative trends and spatial characteristics such as different types of borders as well as different locations. As such, trends create a visibility of border guards' differentiated, site-specific confrontation with increasing or decreasing numbers of migrants (cf. Fig. 3; taken from Frontex, 2012a: 17; on the specific production of cartographic knowledge through Frontex maps see van Houtum/Bueno Lacy, 2019).

Yet, trends also speak to the future as they allow Frontex to "anticipate where borders are likely to come under most pressure" and to produce "foreknowledge" (Frontex, 2015b: 37). If it is possible to establish future pressure points from past data, this possibility rests on the assumption that the future follows the linear route prescribed by the past. Hence, describing threats "will often involve references to historical data" (Frontex, 2012c: 21), focussing on "recurring patterns among incident reports" (Frontex, 2012c: 21).

⁷ ARAs are the central documents in order to help Frontex' planning activities for the institution's subsequent annual programme of work. On the basis of these reports, Frontex plans activities and allocates resources. ARAs have been published annually since 2010.



Source: FRAN data received as of 10 February 2012 Figure 2: "Detections of illegal border-crossing by route and by quarter" (Frontex, 2012a: 15)

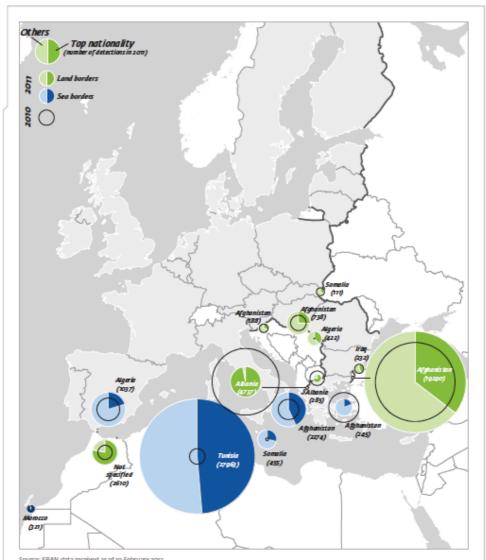


Figure 3: "Main areas of detections of illegal border-crossing in 2011" (Frontex, 2012a: 17)

Historical data allow for "the generation of hypotheses that then should be tested prospectively" (Frontex, 2012b: 34f). In this reading, threats follow a chronotic temporality, appearing as discrete, yet clustering moments in time. Trends' anticipatory capacity relies on an ontological take that conceptualises the future as the repetition of the past: "what we are seeing in the future is not a guess, it is something that is based on knowledge, something that we know" (EBCGD, 2014b). This knowledge is built around the extrapolation of statistics that comprise past events, expressing a fundamentally biopolitical project that seeks to skim normality from the phenomena themselves instead of relying on a pre-given (disciplinary) norm (cf. Foucault, 2009: 57ff). Statistical knowledge, expressed as graphical depictions combined with the concrete spaces suggested by maps, produces migration as a graspable and thus governable phenomenon that expresses itself through flows.

A lecturer in a Frontex seminar on risk analysis (held at the Police Academy in Bucharest in 2014) articulates the practical meaning of risk as one of turning "uncertainties into certainties so to exclude those factors what we don't know and concentrate on things what we might know" (EBCGD, 2014a). Lacking a crystal ball – a picture called upon in the same seminar – risk seems to practically work by producing certainties through reading situations through the past.

In terms of empirical techniques, Frontex' '*Guidelines for Risk Analysis Units*' (Frontex, 2012b), which sets "standard guidelines" (Frontex, 2012b: 5) for risk analysis practitioners, suggest a number of fitting empirical and diagnostic techniques that rely on historical evidence. An empirical technique, 'simple induction', can be read as a prime example of a biopolitically informed risk assessment technique. Building on the example of forged documents, it assumes that

"if 0,5% of passenger travel documents issued before 2000 are forged (known from historical data), there is therefore a 0,5% probability that an individual showing up at the border control with a travel document issued before 2000 has a forged document" (Frontex, 2012b: 35).

Normality does not exist as a norm (except for the underlying legal requirement of legitimate documents). Instead, it is produced through the assessment of reality itself. However, it should be noted here that border professionals' reading of reality rests very much on the available means through which reality becomes assessable that are productive of specific imaginations of what reality looks like. To stick to the example of forged documents, if a new technology offers a more nuanced check of documents, resulting in a significant decrease in the number of false negatives, 'reality' changes and hence 'normality' shifts. As for diagnostic techniques, all examples mentioned rely on past experiences, through 'check lists' that include listings of 'standard factors'' (Frontex, 2012b: 35) derived from past events, 'indicators' that build on ''pre-established sets of observable phenomena'' (Frontex, 2012b: 36) and especially

'chronologies' that allow for "structuring information into designated time periods" (Frontex, 2012b: 37).

Based on trends, risk analysis also subscribes to an assumption of continuity, as the future emerges as the sequel of what happened in the past. This assumption renders the future calculable and effectively striates time. While risk "is always future-oriented" (EBCGD 2014b) this future emerges from a reading of the present that is understood via "getting the data right, getting the trends, getting the intelligence right, understand what is going on" (EBCGD 2014b). In contrast to the bidirectional causality inherent to pre-emptive security practices, this supports a linear understanding of causality. Incidents in the past lead to the designation of a trend (through patterning several incidents) that steadily moves through *chronos*. The assumption of chronotic continuity makes it possible for risk analysis to be more than "a reaction to fires" and rather function in a "proactive [and] continuous" (EBCGD 2014b) manner. Future-orientedness thus emerges through the extrapolation of the present that is understood as an instance of a continuous past trend:

"we are told that we are not enough future-oriented. The point is, you can't really speak about futures unless you know what you are dealing with now, so we need to understand the situation" (EBCGD 2014b).

As such, the current situation is effectively decisive in constructing a sense of what is about to come, and the reading of the current situation depends on setting it into relation and comparing it to the past.

4.1.2 The problem of virtuality and the unexpected event

If trends represent the bald answer to the humorous unease concerning the next emergency, they do so by producing a presence of the future that lacks futurity. Their reading of the future relies wholly on the past, the past's production of the present and the present's continuation into the future. Practically, this rationality led to an extensive use of databases in the European border regime, whose interoperability holds the promise of ever more nuanced knowledge of (in)dividual travellers as well as mobility as a broader phenomenon (cf. Dijstelbloem/Broeders, 2015; Broeders, 2007). Although trends represent a prominent practical thinking tool, they are in fact continuously questioned and debated both, during various panel discussions on the EBCGD as well as in methodological terms in the practical '*Guidelines for Risk Analysis Units'* (Frontex, 2012b). The paucity of extrapolations of the past – and thus the charge of a deficient take on the ontology of the future – create an urgent need to be met, which finds its equivalent in a focus on preparedness and contingency planning as well as the utilisation of scenario studies as a tool to map virtuality.

References to the so-called Arab Spring are a recurring pattern and serve as a focal point through which the problematisation of risk operates in the discourse of border professionals. Two interpretations arise regarding the relation of the Arab Spring as an extraordinary event to risk analysis. The first one ascribes the failure to predict to a lack of data, thus operating within the classical biopolitical rationality that renders reality graspable as a set of ever more nuanced statistical embraces of the population. Risk analysts were "wrong-footed by the Arab Spring" (Frontex, 2015b: 38) since they "saw no change in migratory patterns that might have warned us [...] as we did not have access to the right sources of information from that region" (Frontex, 2015b: 38). As Laitinen argues, there were clues that

"we afterwards were able to analyse as indicators for something like Arab spring might happen. [...] And if we only had the possibility to see it at that time, we would have given more awareness to that" (EBCGD, 2012).

Operating on an epistemological terrain, these readings of the Arab Spring picture it as something that border professionals could have known, had they been able to access relevant data and to interpret their data correctly.

A different interpretation, however, goes further, problematising risk *as such* and explicitly contending the potential of the occurrence of unknown events and the resultant problems for governing the border. In contrast to the first interpretation, this reading shifts the problematisation of the future from the more or less likely repetition of the past to the looming virtual potential of the *unexpected event* with the potential to radically change the conditions in which borders have to subsist. It therefore operates more distinctly on an ontological terrain, contending the reality of the virtual. It also connects the Arab Spring to the limitations of an epistemically sound assessment (including extrapolation) of migration more broadly:

"there was an unprecedented flow of migrants arriving to the small tiny island of Lampedusa [...]. Nobody was able to predict that this was going to happen in such a short time, neither the Italian authorities nor Frontex, or nobody in Brussels. [...] As I said, it's [risk analysis] not telling the future. There are uncertainties, there are so many factors and in particular in the field of migration [...], and we don't know what their impact will be, because these are out of our control" (EBCGD, 2014a).

The Arab Spring is conceived as "a reminder to migratory flows that can change without any prior warning" (EBCGD 2014b), a part of migration that "can happen in unexpected ways" (EBCGD, 2012). Despite the efforts of risk analyses, "in this world, largely defined by mobility, there are still events that catch us totally unaware. And the Arab Spring was very much that" (EBCGD, 2012). The notion of the unexpected event problematises attempts to subject the future to a regime of certainty. Instead, it is precisely uncertainty and the fact of potential unexpectedness that renders the prospects of producing certainty illusive. As the starting condition

this problematisation rests on the assumption of the factually existing potential of the unexpected, it works on an ontological rather than an epistemological basis.

On one side, there are empirical elements to this problematisation. These concrete uncertainties emphasise either the past occurrence of unexpected events or present uncertainties, that is, things that in the light of the currently available information remain unknown. Past events include the surprises of the Arab Spring, the financial crisis of 2008 or the end of the Cold War (cf. EBCGD, 2014b; EBCGD 2013a; EBCGD, 2012). The present form of concrete uncertainties concerns for instance "the timing, as well as the size and composition" (Frontex, 2015a: 47) of migration flows from North Africa and the Middle East. Concrete uncertainties then produce disparate, heterogeneous events such as the end of the Cold War, the financial crisis and the Arab Spring as a series of occurrences, productive of a specific form of reality (Lundborg, 2012: 29). Unintelligible through risk analysis, this emerging homogeneous series of unforeseen events allows for "retrospective positioning" (Lundborg, 2012: 29) as repetitions of instances of uncertainty. Initially, this could be seen as just a different mode of extrapolation of the past that assumes the repetition of the unforeseen. However, I want to maintain that the unexpected event is different since it insinuates that future instances may be of a different kind than past ones. While risk analysis sees the continuance of a migratory trend, a focus on the unexpected needs to prepare for a much broader array of events and must notably also focus more thoroughly on the resilience of the border system it seeks to protect. The specific form around which these events are retrospectively positioned may be referred to as abstract uncer*tainty*. Abstract uncertainty articulates a fundamental unease in the perspective on the world and the imagination of the future as well as a sense of suspicion regarding past-oriented modelling of the future. The repetition of the past here implies a potential inherent to the future to become different. This potential has been experienced in the past, yet it evades calculation since it came as a bad surprise, and it is that abstract potential of the repetition of that which cannot be grasped through assumptions of repetition that abstract uncertainty comprises.

An emblematic episode from the EBCGD 2014 illustrates this emerging problem and the different perspectives on the future. In a panel discussion on 'Contingency Planning and the Challenges of Border Control' an encounter happens between Mari Juritsch, then head of the analysis and planning sector in Frontex and Gil Ad Ariely, an academic researcher and consultant dealing with knowledge management and futures thinking. Ariely who leads the discussion asks the panel if "future challenges to borders can be anticipated" (EBCGD, 2014b). Juritsch answers that "[w]e do belief that future crises and situations can be anticipated" yet she immediately stresses a qualification when she continues that "the luxury that we don't have usually is to come together and have to think about unknown unknowns, really out of the box situations" (EBCGD, 2014b). Instead, daily work consists in countering "uncertainties that we already

know are there" (EBCGD, 2014b), based on "monitoring, identifying those drivers that are important in the dynamic of that particular uncertainty [...] from the basis of the knowledge we have" (EBCGD, 2014b). Shortly after, Ariely counters Juritsch's argument:

"The limitation of extrapolating on existing data is of course the wild card or the unplanned event. This is when the chicken becomes lunch, which is nothing that the chicken could anticipate based on any empirical experience it had before" (EBCGD, 2014b).

While Juritsch stresses the classical stochastic means of risk analysis, Ariely's argumentation is rather subjunctive. The potential of the chicken becoming lunch is present as a virtual layer of reality that exceeds its actual boundaries. Pointing to this potential of the unexpected event questions a narrative of turning uncertainties into certainties. The logic and rationality behind this argumentation are conditional and thus, subjunctive: What if an event occurs in an unforeseen way, regarding which we lack experience? Abstract uncertainty then forms the basis a problematisation of futurity as a 'bad surprise' (Anderson, 2010: 783), hence giving an important twist to the construction of futurity as such and the register through which the future is imagined. It is both epistemological, questioning if it is viable to know the future via the past, and ontological, claiming that the future is an open, virtual realm of potentials. If we assume abstract uncertainty, the future potentially escapes chronotic manageability and instead takes on kairotic qualities, insinuating "the possibility of interrupting such 'natural' succession by making exceptions to chronotic time" (Lundborg, 2016b: 263). The formation of the kairotic hypothesis draws on a system of knowledge referred to as 'futures studies' (EBCGD, 2013a; EBCGD, 2014b, Frontex, 2011), which highlights the impossibility of forecasting in complex systems. In fact, in a slightly different form, the chicken example above appears in Nassim Nicholas Taleb's work 'The Black Swan' (Taleb, 2007: 128). Another prominent article entitled 'Living in a world of low levels of predictability' (Makridakis/Taleb, 2009) that is quoted in the 'Futures of Borders' study (Frontex, 2011) encapsulates this theme as it claims that "[t]he future isn't it what it used to be, or alternatively, history never repeats itself in exactly the same way" (Makridakis/Taleb, 2009: 841). It rejects extrapolative assumptions of constancy and instead highlights that "[t]here are always new and unforeseen events, Taleb's Black Swans, that cannot be predicted beforehand and that further increase future uncertainty" (Makridakis/Taleb, 2009: 842). This abstract potential of uncertainty illustrates an understanding of the future as a virtual realm that escapes predictability and that is contrasted with a logic of turning uncertainties into certainties. As such "Black Swan logic makes what you don't know far more relevant than what you do know", as "[t]he inability to predict outliers implies the inability to predict the course of history, given the share of these events in the dynamics of events" (Taleb, 2007: 29ff). Models that build on past occurrences may even become rather disturbing for an assessment of 'reality':

"The result is that when we try to make models of this data and try to predict something to happen, we try to build models to do what the data did even if the data are telling us only part of the picture" (EBCGD 2013c).

This puts the classical biopolitical logic of risk analysis into question and instead points to the potential of change in the objects of governance. Assuming their stability in terms of composition and behaviour *over time* becomes problematic as soon as phenomena, for example migration, are treated as being emergent.

Hence, border security professionals are reminded that they cannot, with any certainty, ensure that no bad surprises happen. Turning the order of *chronos* against itself, this kairotic hypothesis suggests a new normality of the unexpected. The future as bad surprise circumvents assumptions of continuity and stability of phenomena over time. Although there is no indication why we should have to deal with a *bad* surprise – after all surprises may bring positive effects – this is an underlying assumption:

"we have a bit of a psychological barrier to overcome [...] because we have a tendency to block out thinking about bad things [...] we prefer not to think about potential bad things" (EBCGD, 2014b).

It becomes the duty, in the light of an unknowable future, that this future is threatening and that we need to be prepared. As Leese has it, "[a]nticipation then becomes dominated by an affective startle that intentionally seeks to override the full spectrum of contingency and prioritises a particularly bleak set of threatening futures that become folded back into the present" (Leese, 2016b: 148). Subjunctive reasoning becomes the grammar of a dispositif of virtuality in bordering practices, which is reflected in key arguments reiterated in the problematisation of risk-based assessments. The doubt of the stochastic devices of trend analysis and classical risk analysis relies on hypothetical what-if constructions. Imaginability trumps probability. On a panel in 2012, this logic is spelled through the example of the avian flu:

"just a couple of years or so ago, there was looming a threat relating to the avian flu. It did not occur, it could have occurred. A massive health threat could change all the dynamics at border [...] So there is a need for us to think of possible scenarios that might occur, certainly a great need for preparedness and capacity building" (EBCGD 2012).

This subjunctive voice produces a presence of the future as the potential of the bad surprise. Uncertainty then is less an epistemic problem to be solved but rather an ontological condition implying incalculability as such. Uncertainty as an ontological condition that limits any attempts to predict the future based on past events is present in how migration – as the central phenomenon to be governed at the border – is to be dealt with. Migration is characterised by significant degrees of uncertainty which makes predictions of its future development hard, even

if historical data suggest trends in migratory patterns (EBCGD, 2013a). As the 2014 ARA states, "composition and/or the size of the flow will vary in response to the developing situation in North Africa and in the Middle East, particularly in Syria and neighbouring countries" (Frontex, 2014a: 67). Migration thus lacks self-contained, stable qualities and is instead always becoming within a complex environment. Indeed, complexity amounts to both, a condition 'out there' that makes it hard to predict and that at the same time influences attempts to model migration as a phenomenon. A talk entitled *'Future of migration'* by Alexander Betts (EBCGD, 2013a; building on the work by de Haas et al. 2010 and Paoletti et al. 2010), a migration expert from the University of Oxford alludes to this interplay between uncertainty as an ontological condition and its epistemological consequences. He stresses

"trigger events or major structural changes in world politics that we fail to predict but have major impacts and create degrees of uncertainty that are extremely challenging for academics, policy makers and practitioners" (EBCGD, 2013a).

Due to the potential impact of "surprises" (EBCGD 2013a) – a fact understood as contextual uncertainties (de Haas et al. 2010: 6) – leads to model uncertainties (de Haas et al. 2010: 5), thus marking an "ontology of objective unknowability beyond merely epistemic limits" (Chandler, 2014: 49). These limits are reflected in a lack of theoretical understanding of how and why migration comes about, not least since it is hitherto highly complex to control for the potential of an unexpected event with major yet incalculable impacts. These kinds of events "cannot be easily accounted for using traditional forecasting methods" (Paoletti et al. 2010: 3; de Haas et al. 2010: 5). As a phenomenon that confronts the border and that bordering practices seek to govern, migration is hence constantly becoming. The continuous emergence of migration, its ontology that not least comprises rapid adaption to unexpected events, makes it hard to grasp epistemically. Whereas classical biopolitics highlighted the regularities of migratory patterns, discussing the future of migration as Betts does problematises the virtual through pointing to the potential of "non-linear emergence" (Dillon, 2003: 544). The ontology of migration is expanded by a virtual layer that insinuates its potential becoming-different (Scheel et al. 2019: 582).

Although the take on migration presented by Betts can be read as an attempt to point out state-of-the-art academic shortcomings (which is also reflected in his critique of a securitisation of migration that reaches for "prediction as a way of controlling" [EBCGD, 2013a]), it is interesting to see how experts on the subsequent panel discussion '*Border control in times of crisis*. *Through the eyes of practitioners*' take up his argumentation, amplifying a notion of abstract uncertainty. Here, as a "very present and insistent reality that is not going to change" (EBCGD, 2013b), migration always already involves the potential to surprise. As such, although "the potential is there", "it is not possible to make some very clear predictions" (EBCGD, 2013b).

The discussions on the panels of the EBCGD take up a problematisation that is already evident in the two main methodological documents concerning the practical operation of risk analysis, '*Guidelines for Risk Analysis Units. Structure and tools for the application of CIRAM version 2.0*' (Frontex, 2012b) and '*Common Integrated Risk Analysis Model (CIRAM). A comprehensive update*' (Frontex, 2012c), as well as the '*Common Risk Analysis Model. Summary Booklet*' (Frontex, 2013b). As the chapter on 'Analytical Techniques' in the practical '*Guidelines for Risk Analysis Units*' states,

"rigorous reading of historical facts can prove insufficient for predicting first-time, unexpected or rare scenarios, which is why the traditional methodologies often work best when used in combination with one or more imagination-based techniques" (Frontex, 2012b: 34).

It characterises risk analysis as "an imperfect science" (Frontex, 2012b: 37), unable to capture "rare or uncertain events where there is a distinct lack of guiding empirical data" (Frontex, 2012b: 37). Addressing the problem of a deficient reading of futurity emerging from risk analysis based on trends alone, the '*CIRAM*' states that

"If quantitative or qualitative assessments are not available, impact can be measured through the description of outcomes arising from inductive analysis (some-time referred to as 'educated guess' or 'informed estimation') or scenario analysis" (Frontex, 2012c: 31).

Scenario analysis as a practical way to deal with the problem of futurity is also taken up in various EBCGD discussions (EBCGD, 2012; 2013a; 2013b; 2014b). Betts (EBCGD, 2013a) proposes scenario planning to confront the uncertainty characterising the 'future of migration' and Laitinen proposes the viability of scenario planning if no information exists regarding a situation or as a means to confront the unaswerable question regarding the next crisis:

"That's very demanding, not only to the border guards but also to the others to follow the indicators, drafting, developing scenarios, and plan and improve the readiness to be ready to tackle whenever and what type of event will come up" (EBCGD, 2013b).

Scenarios are thus said to propose a solution to the urgent need that is established through the problematisation of the future and the subsequent notion of the unexpected event. Scenario planning represents a specific technology which counters the urgent need to act in the face of uncertainty, laid out through the problematisation of the future through the unexpected event (cf. Cooper, 2010).

Summarising the chapter and referring its findings back to the analytical order provided by the dispositif, what are the main rationalities guiding a dispositif of virtuality with regards to the

EU border? While risk analysis plays a crucial role in governing the border, I argued that the practice of risk analysis is problematised in the border security discourse. This is due to a conflictual take on the ontology of futurity. While risk analysis rationalises futurity as the more or less likely repetition of past events, the problematisation I described contends the potential of the occurrence of unexpected events. Instead of understanding this potential as a mere residual probability, this potential constitutes the core of a rationality of subjunctive bordering, as it places heavy emphasis on the ontological absoluteness of this form of abstract uncertainty. It builds on a kairotic hypothesis that plays on the register of virtuality assuming a co-presence of various futures and embracing an ontology of futurity as "exploding into a shower of future sparks, only one of which will actually strike tinder and take" (Massumi, 2015: 117), the actual strike being the potentially unexpected and disruptive event, the bad surprise (Anderson, 2010). Rather than the actualities of past events purported by risk analysis, the kairotic hypothesis is unbound by the stochastic and calculative regime of risk analysis as it rests on an order of imaginability. The consequence here, however, is not rejecting risk analysis altogether, as a subjunctive rationality rather completes risk. Paradoxically, it draws its appeal from suggesting more complete knowledge of the border, a more complete epistemic picture by pointing to the incompleteness of knowledge, which it understands to be first and foremost an ontological condition, rather than an epistemic problem. With Jean-François Lyotard, we can argue that pointing to "undecidables, the limits of precise control, conflicts characterized by incomplete information", this problematisation "is changing the meaning of the word knowledge. It is producing not the known but the unknown" (Lyotard, 1984: 60). This also points to a shift in biopolitics, adding a virtual layer of co-present potential futures to its originally extrapolative take on futurity.

The rationality of subjunctive bordering thus urges bordering practices to leave behind the constraints of empirical past events and instead embraces an "active approach towards the future" (Frontex, 2011: executive summary). It also produces an urgent need to cope with uncertainty and, especially, to act vis-à-vis uncertainty. This translates into searching for epistemological strategies that are able to compute the reality of the virtual co-presence of futures and the limits of knowledge by extrapolation. One solution that is repetitively proposed is engaging in scenario analyses and imaginative techniques more generally. Exploring these strategies as emerging technologies of government that allow bordering to performatively capture the undecidability of the future is the aim of the next section.

4.2 Mapping the future border through scenarios

"This would be the first barrier to overcome, that we allow ourselves to think in this way, to imagine these scenarios, [...] difficult scenarios that could happen in the future and then think through how could we deal with that" (EBCGD, 2014b)

The preceding section explored how a problematisation of the future as a virtual realm motivates a rationality of subjunctive bordering. In this section, I want to investigate some specific practices that adhere to this rationality. My argument here is twofold. Firstly, scenario planning deals with ambiguity by structurally mirroring it in its own operation. This works by creating events based on a subjunctive grammar that adhere to a durational temporality. Yet, secondly, I argue that these events do not merely map the virtual but instead are themselves forms of actualisations and hence productive of effects in the present. These effects involve a tendency to map the virtual and the unexpected as dangerous. This leads to a focus on a specific set of tactics such as preparedness, contingency planning and vulnerability management. Read through the lenses of a dispositif of virtuality, it becomes visible how these technologies produce an orientation that lets the absence of suspicion appear suspicious.

4.2.1 Scenario analyses and imaginative practices

With scenario planning emerging as an important technology of government that responds to the problem of the unexpected event, some words are due in order to situate the onset of these practices. Though we saw above that the problematisation of the unexpected event is evident throughout the material, it takes up until 2013 until this form of reasoning is actively included in the Annual Risk Analysis reports, acknowledging that

"past experiences demonstrate that there are a large number of unforeseeable events and factors that can have a profound and unpredictable impact on the situation at the border" (Frontex, 2013a: 61).

This phrase becomes standard wording in subsequent ARAs (except for Frontex, 2017a). Most explicitly and prominently, in the foreword to the 2016 ARA, Fabrice Leggeri, then Executive Director of Frontex, accentuates that

"Basing future analyses merely on trend analysis or environmental scans will no longer be effective or adequate. The Risk Analysis for 2016 describes a series of alternative future scenarios developed in collaboration with experts from relevant organisations. I encourage all stakeholders to make use of them as a foresight instrument at a strategic level" (Frontex, 2016). It explicitly points to the limits of trend analysis and recommends the use of scenario analysis as an epistemic technique to compensate those limits. The 2016 ARA thereby takes up a discourse that has been floating around the border security community since at least 2011. In this year, the '*Futures of Borders*' study was published, a central document in terms of proposing epistemic practices to compensate for the shortcomings of risk analysis. Commissioned by the Frontex Risk Analysis Unit and crafted by experts from the consulting firm Liron Systems Ltd. as well as academics from the University of Southampton, UK, and the University of Ben Gurion, Israel, the study aims at "triggering interest among practitioners and managers alike, to think about the future and futures risks and research them further" (Frontex, 2011: 95). The study introduces 'futures thinking' into the realm of border security and makes the argument that "[t]he use of scenarios becomes apposite" (Frontex, 2011: executive summary), given the paucity of extrapolating from existing data which lacks an acknowledgement of "possible effects of the unexpected" (Frontex, 2011: 3).

More generally, scenario planning has its origins in strategic military thinking and from there was proliferated towards the realms of business management (Cooper, 2010; Aradau/van Munster, 2011). Its lines of origin go back to Rand Corporation's (RAND) engagement with futurity and scenarios in the 1960s as well as the utilisation of the scenario-planning method through Royal Dutch Shell in the 1970s. Both, RAND and Royal Dutch Shell are quoted as inspirations for the transfer of scenario planning to the European border. This is also reiterated by Mark Maguire's ethnographic account of the EU border security community in which

"security experts [...] told relatively consistent stories about the cultural origins of their activities: scenarios, I was told repeatedly, owe their origins, firstly, to the Cold War activities of the Rand Corporation" (Maguire, 2015: 75)

and "experts also pointed to apparently successful uses of scenario-building and foresight by Royal Dutch Shell" (Maguire, 2015: 75). The relation to RAND and Royal Dutch Shell is also apparent in Frontex' utilisation of the method, as both are quoted as intellectual sources in the 2011 study. Method-wise, the 2011 study also takes inspiration from the UK Ministry of Defence's '*Global Strategic Trends*' Programme (Frontex, 2011: 61; cf. Ministry of Defence, 2010). The 2016 ARA follows a civil orientation in commissioning the German consulting firm ScMI (Scenario Management International, 2020) as well as 20 experts (half of them Frontex experts, the other half delegated by member states [Frontex, 2016: 11]).

Scenario analysis is part of a broader range of "[i]magination techniques" (Frontex, 2012b: 39), including structured brainstorming, multiple scenario generation, structured whatif technique (SWIFT) and high impact/low probability analysis (HI/LP). Through these techniques, imagination becomes a central form of reasoning to confront "highly ambiguous situations where data is lacking and the chances of unexpected developments is high", suggesting that "events are unfolding in a way not previously imagined" (Frontex, 2012b: 39). Imagination techniques can be read as a translation of a subjunctive rationality into a concrete and routinised technology of government (cf. Lentzos/Rose, 2009: 236; Brassett/Vaughan-Williams, 2015: 38). Imaginative practices hence help border professionals to become "attuned to uncertain and multiple potential futures" in an attempt to "model' potential futures" (Lentzos/Rose, 2009: 236). A routinised use of scenario analysis is a defined goal of the Futures of Borders Study (Frontex, 2011) and the 2016 ARA (Frontex, 2016). The former "strongly recommends the education of border guards with strategic-level responsibilities in futures thinking" (Frontex, 2011: executive summary) and emphasises that "[b]order guards' education should be informed by futures preparation [...] through teaching about complexity, futures and technology" (Frontex, 2016: 58) and to recommend the method "as a foresight instrument at a strategic level" (Frontex, 2016: 5). The use of imaginative practices emerges as a viable alternative tied to situations in which "it is not possible to assess threats either quantitatively or qualitatively" (Frontex, 2012c: 24).

As a capacity, imagination mirrors the unexpected by engaging in "outside-the-box thinking" (Frontex, 2012b: 39), and therefore is understood to be self-evidently closer to the unexpected and to grasping the unknown future than risk analysis through trends. As Hermann Kahn, the most famous RAND strategist associated with scenario planning wrote,

"[i]magination [...] has always been one of the principal means for dealing in various ways with the future, and the scenario is simply one of the many devices useful in stimulating and disciplining the imagination" (Kahn, qtd. in Lakoff, 2007: 260).

Imagination, in contrast to more rigid methodologies, is ascribed an ability to process the inherent ambiguity of futures more soundly. This is not least the case because scenario analysis itself expresses (temporal) ambiguity and makes use of it, even constructing it as the core of its original contribution to approaching the future:

"instead of attempting to resolve upon a single, exact picture of the future, it consciously explores various ways that a situation might evolve, anticipating surprise developments and generating field requirements when dealing with little concrete information or highly ambiguous or uncertain threats" (Frontex, 2012b: 40).

Importantly, scenarios are therefore not about prediction and instead aim at presenting various potential futures and sketching alternatives (EBCGD, 2014b; cf. also Anderson, 2010: 785). Scenario analysis for Frontex involves "the development of descriptive models of how the future might turn out" (Frontex, 2012b: 40). It therefore relies on the production of multiple futures including the potential of the unexpected event (EBCGD, 2014b). Its imaginative approach hence subscribes to the kairotic hypothesis as described above. It builds on the

assumption that past observations do not "necessarily remain valid at a future point" and instead tries to premediate "potential paradigm shifts and turning points, which may only be tangentially connected to past trends" (Frontex, 2012b: 40).

The scenarios published by Frontex (Frontex, 2016; Frontex, 2011) can be understood as events in the sense that they produce a presence of overlapping futures in the here and now. Their main purpose is to enable strategic planning which is based on a longer-term perspective that comes with high degrees of uncertainty (Frontex, 2016: 54; Frontex, 2011: 25). As argued above, events comprise the potentiality of the future – and therefore also its potential to turn out differently than expected – but also speak order to the messiness of futurity. They can thus be understood as mapping devices both in methodological terms (cf. Fig. 4), answering the question how scenarios provide an answer to the problematisation of the future and the unexpected event, and in empirical terms, as they provide visualisations of potential constellations of events (cf. Fig. 5).

Scenarios speak order to futurity by producing mutually overlapping yet different kinds of futures that occupy the same temporal space and therefore express an "indifference to the law of non-contradiction" (Cooper, 2010: 174). This is the case because scenarios map a virtual realm that allows for overlapping, non-actualised potentials only one of which will eventually actualise. In so far, the "present is cut into by a co-presence of futures" (Massumi, 2015: 117), adhering to a durational form of temporality as a basis for the practice of scenario analysis. In turn, the different kinds of futures mapped by scenarios meander between an assumption of manageability and chronotic continuity and a kairotic hypothesis that insinuates the actualisation of the unexpected. Therefore, "[r]eciprocally and inversely, the future is proto-spatialized into divergent pathways" (Massumi, 2015: 117). Chronotic continuity produces 'probable' futures, and to a lesser extent 'alternative' futures.

Probable futures model a "direct or probable continuation of existing trends" and act as a "predictable narrative of a future that is founded on identified 'megatrends' that are already emerging as evident in the present" (Frontex, 2011: 59). Alternative futures instead allow for derivations from current trends and "help to identify critical uncertainties that have substantive (yet unquantifiable) probability" (Frontex, 2011: 59). On the other hand, the plausible-preferred as well as the wild card variants of futurity both express kairotic qualities. The former functions as a tool to formulate political visions. It thus departs from the purported 'realism' of chronotic futures and instead focusses on *kairos* as a creative time of utopian transformation which expresses a subjective, standpoint-dependent preference (Frontex, 2011: 60). In contrast, wild cards most explicitly embody the problematisation of the future and the potential of the unexpected event as they try to capture the "unpredictability of events that have a low probability

but potentially enormous impact" (Frontex, 2011: 60). These different variants of futurity represent a negotiation between striation and smoothness.

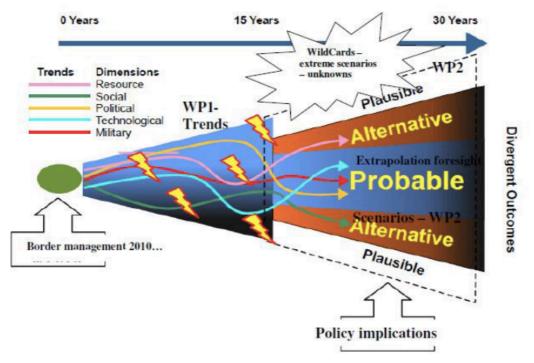


Figure 4: "Different Futures Methodologies (and types of scenarios)" (Frontex, 2011: 61)

While fundamentally, scenario analysis builds its appeal on the claim that the future is unpredictable, it nevertheless makes a claim to manageability and to capturing virtuality at least to a certain degree. Consequently, scenario analysis maps the future by providing glimpses at potential futures, and, possibly more importantly, by offering ways of acting in the face of uncertainty. In fact, scenario analysis itself and the exercise of mapping is already a first step and a form of acting vis-à-vis uncertainty. One important difference between the chronotic and the kairotic future variants is that while the former ones build their claims on existing reality, the latter ones rather represent a call to action in the absence of such a baseline, agreed reality. The utopian variant of plausible-preferred futures calls for action in the sense of formulating aims and working towards their attainment. The wild card variant instead formulates its call for action on the suspicious absence of probability or evidence:

"It is important to be aware of possible wild card scenarios as early as possible in order to prepare strategically for the unlikely yet acute repercussions which would otherwise be ignored due to their very lack of probability" (Frontex, 2011: 60).

Again, this builds on the subjunctive logic in which the potential of a high impact suffices to orchestrate a respective alignment of action. Wild card scenarios explicitly claim to provide an answer to the problematisation of the future as a repetition of past events:

"Wild Card scenarios are a challenging attempt at identifying 'the unknown unknowns' in futures. Perhaps more than other types of scenarios, wild-cards draw from insights of complexity and chaos theory in dealing with what is called 'wicked problems'. [...] '[W]ild-card' scenarios are an attempt to identify the 'black swan' in advance" (Frontex, 2011: 61).

How exactly does scenario analysis produce events? As I argued above, my take on events builds on a durational understanding of temporality. As such, events represent a condensed form of time in which the potential of futurity is brought into the present. While scenarios-asevents thus cannot attempt to tame virtuality (which would contradict scenario analysis' premise), they try to capture it through a situational fixation of contingency. Future narratives thus extend "beyond the concrete time during which the event occurs" and "include[s] the framework of potentials" (Samimian-Darash, 2009: 486). Scenario analyses hence produce events by engaging in narratives of the future that are geared towards the capabilities, duties and restrictions of border management. These narratives form memories of the future that provide a guideline for practical action that works through the quasi-causal operation of a future cause that proscribes a point of orientation in the present and influences it. For example, a scenario entitled 'Restrictive Policies' narrates that

"The EU has turned away from the idea of a stronger integrated federation. Traditional values dominate, and in many Member States there are critical views on foreigners for different reasons, which leads to restrictive migration and asylum policies" (Frontex, 2016: 57).

It also assumes a growing threat of terrorism and an increasing importance of organised crime groups. While this scenario is later characterised as 'probable', an alternative 'Open Doors' scenario is dismissed as having the "greatest distance to the expected future" (Frontex, 2016: 58). This scenario constructs a future in which "[d]ue to this social conviction, Europe opens its arms and welcomes large numbers of migrants, especially by a permissive legal migration policy" (Frontex, 2016: 52). The striation emerging from different degrees of expectation results in yet another map of the future (Fig. 5). While this map maintains a strong commitment to chronotic continuity, it also allows for the continued presence of kairotic elements. Also, the map gives the impression that different kinds of futures are pulling the present, thereby moving the present's origin to the future and playfully messing with concepts of linear causality.

While refraining from speculations about potentially disruptive unexpected events, the aim of the 2016 scenario analysis is to escape "fixed expectations or ideals about the future" (Frontex, 2016: 54). Moreover, the study emphasises the increasing importance of (global) *change* as a marker of the "dynamic and very complex environment" (Frontex, 2016: 54) in which EU border management needs to subsist.

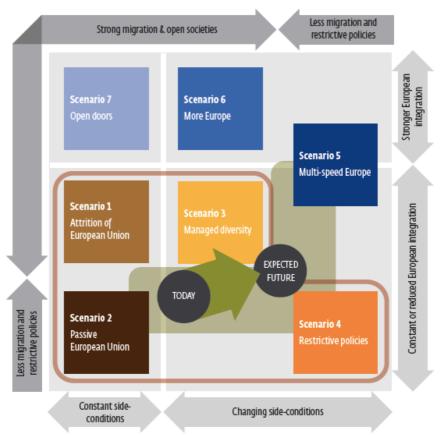


Figure 5 "Scenario Assessment. Expected Future" (Frontex, 2016: 59)

Although the 2016 ARA underwrites the potential of the unexpected event as a basic assumption, the 2011 study is more explicitly involved in attempts to tackle this potential through wild card scenarios. One of the wild cards produced entitled 'Here be Dragons' paints a dystopic future either resulting in a scenario called 'The Four Horsemen' or 'Peak Oil' (thus both bearing apocalyptical connotations). Both scenarios work on the same dystopic conditions that the study outlines in detail. The picture painted comprises economic collapse due to the disintegration of the Euro regime, environmental catastrophes and political instability producing "waves of refugees" overwhelming EU borders and leading to the staging of a global "clash of civilisations" (Frontex, 2011: 81). Criminal organisations are imagined cooperating closely and using social networks to organise mass influx of illegal migrants, whereas terrorist groups capitalise on the new weakness of the border. Eventually,

"EU border control collapses in some points and the resultant vacuum leaves the borders porous. Population movement is uncontrolled, organised trans-national crime flourishes and smuggling increases exponentially becoming an endemic problem to Europe" (Frontex, 2011: 86)

Discussing the importance of wild card scenarios, the study sees their value in identifying "wicked problems" (Frontex, 2011: 61). It is thus important to base an interpretation of this scenario not so much on its specific (apocalyptic and, coming from a different theoretical perspective, most likely 'securitising') contents. Instead, I want to focus on its attempt of

appropriating contingency as such. Wild cards explicitly tackle unknown unknowns by producing a presence of contingent potentials, such as a sudden increased cooperation of traffickers that use new technical means to organise crossings of weak border areas. The concreteness of these events however is characterised by an underlying assumption of abstract uncertainty as discussed above. Thus, wild cards self-consciously produce merely *one* of potentially infinite potentials of major distress, they produce a glimpse of "the <u>type</u> of event that <u>could</u> happen" (Frontex, 2011: 55; emph. in orig.). This vagueness is crucial, as it represents an abstract call to act in order to become prepared. Scenarios performatively produce the claim that the future's "potential unfolding must be pregnant with the potential for improvised variations" (Massumi, 2015: 117). Its vagueness "is not simply the absence of clearness and distinctness, but an energized overfullness with a positive determination to be improvisationally determined" (Massumi, 2015: 117), as only action in the present can complete the virtual potential of futurity by actualising and thereby potentially mitigating it.

An additional method, the SWIFT practice focusses on one particular future event instead of multiple overlapping futures. Nevertheless, it still embraces the logic of the unexpected event as its aim is to imagine "extreme eventualities" (Frontex, 2012b: 42) from which border security experts need to work their way backward. They are required to produce a narrative about how that event unfolded, in order to understand which measures ought to be taken to improve the management of the hypothetical situation (Frontex, 2012b: 42). Although SWIFT describes only one potential future, it is durational as it integrates a hypothetical future, the immediate future past leading to this extreme event and the consequences of this future. Against this background which is deprived of the need to stick to causal logics bound to chronotic temporality SWIFT can provide "a line of argumentation based on evidence and logic" (Frontex, 2012b: 76) in the absence of an actual event since this actualisation is (potentially) yet to happen in the future. These actions can be read as disciplining memory so as to adjust present conditions according to a virtual future event, which becomes a "future cause of a change in the present" (Massumi, 2015: 175). Spelling out the notion of abstract uncertainty, SWIFT as a practice renders the absence of suspicious suspicious. It does not matter how improbable the potential bad surprise is as SWIFT helps risk analysts in situations where they "are having difficulty focussing on the consequences of a high impact event because of the perceived low probability of the event actually occurring" (Frontex, 2012b: 76). It is the inability to imagine the unlikely or the unexpected which becomes threatening.

By describing a potential that is not assessed in terms of probability and likelihood but merely in terms of its *imaginability*, imaginative practices are explicitly subjunctive. It is also important to see that the imaginability of a concrete set of potential occurrences is less important for the operation of the wild card than its production of a presence of abstract uncertainty as such. The virtual potential of the future to turn out unexpected, as suggested by wild cards, gains an affective handle on the present and produces a disposition, a need to be prepared for a vaguely threatening future, that is threatening because it is abstract and unknowable. The event of the wild card scenario is trans-temporal, as it bridges the logical gap between a future threat and a present disposition (Massumi, 2005: 36). While more 'likely' scenarios are built with concrete references to existing problems, the wild card is continuously referred to through its abstract qualities as a "wicked problem" (Frontex, 2011: 91) that never contains concrete qualities until it eventually emerges. Viewed through the lenses of a dynamic understanding of reality as comprising the realm of virtual potentials of the future and condensed actualisations, scenarios produce memories of the future. They produce stories that gear memory to the potentially unexpected event. This already hints at the situational orientation that mappings of the virtual adhere to in their actualisations as concrete instructions stemming from the potential of wicked problems.

Summarising these empirical examples of subjunctive bordering, we can see that they rely on an appropriation of imagination in order to resolve the problematisation of futurity explored in the previous chapter. They do so by producing future narratives that provide order to futurity while maintaining the future as a virtual realm that can never be grasped in its entirety, thereby engaging in an ontological politics of the future that is open to be appropriated strategically, for instance by suggesting a need to become prepared. As such, virtuality enables a different strategic repertoire of means than for example risk analysis. Risk analysis legitimates ever more data-intensive bordering practices to better capture the future through the past. In contrast, the future-as-virtuality is rather tied to on-the-ground situational action and operative capacities as it assumes the potential that the border is suddenly confronted with new and urgent threats (see chapter 4.3). Finding themselves between the virtual that they map and the actual they produce, scenarios can be understood as events. While they produce a concrete presence of the future through specific narratives, they also maintain a commitment to a virtual layer which includes the potential of the future to turn out differently than expected. Therefore, scenario analyses also refuse claims to be making predictions and instead are understood to be thinking tools which in turn makes them hard to falsify as they can always plead ignorance. Lastly, especially those scenarios that tackle 'unknown unknowns' can be read as continuations of the notion of abstract uncertainty as found throughout the problematisation of the future in the realms of EU border security professionals.

4.2.2 The actuality/virtuality dynamic of scenario analysis

Scenarios provide a way to negotiate between the virtual and the actual realms of reality. Importantly, the activity of scenario planning *itself* expresses an actualisation of virtual potentials.

Actualisation involves the "solution to a problem, a solution not previously contained in its formulation" (Lévy, 1998: 25) and the capturing of virtual potential through its fixation to specific forms (Lundborg, 2016a: 263). The central problem laid out in various documents and panel discussions (chapter 4.1) concerns the openness of the future and the potential of the unexpected event. Imaginative practices then react to and actualise this virtuality. Scenarios produce a passage "between the powers of speculative imagination and the actual event of world creation" (Cooper, 2010: 174).

Scenario analyses create a form of the formless. By this I mean that they produce a concrete set of images that can be understood as 'guiding ideas' for what the future may look like. This works through the production of memories of the future represented by different kinds of scenarios that sketch how one line of development unfolds and sketching the kinds of effects which bordering practices would have to deal with in this version of the future. The concrete form then exists in the "story' composed detailing the potential steps involved in moving towards the subject scenarios outlined" (Frontex, 2012b: 41). Actualisation here works through language and the specific narrative mode of scenarios that mark them as memories of the future that are narrated in the present. Scenario analysis cherishes imagination as it stresses the importance to "break free from prevailing mindsets and the restrictions of tightly structured methodologies" (Frontex, 2012b: 39; cf. EBCGD, 2014b), which are eventually "impeding creative problem solving" (Frontex, 2012b: 41f). At the same time, the bureaucratic appropriation of imaginative practices needs to provide some elements of ordering imagination. Against the declaration of refraining from tightly structured methodologies, practical handbooks actually provide a range of very concrete guidelines of how to use imagination. These are meant to ensure the effectivity of the imaginative process, highlighting that guidelines minimise the "unwanted deviation from the core topic" (Frontex, 2012b: 39) as well as the likelihood of "forecasting unrealistic scenarios" (Frontex, 2012b: 39). Guidelines also express the need for experienced personnel leading brainstorming discussions in order to ensure a sound process (Frontex, 2012b: 40) or the assignation of different qualifications to scenarios, marking them as 'best', 'worst' or 'expected' cases (Frontex, 2012b: 41). Therefore, scenario analyses create a form for the future (through mapping different kinds of futures and through detailing narrative stories) as well as for the imaginative process of creating memories of the future. Actualisation here takes the form of providing a frame in which virtuality unfolds. Thereby, actualisation has productive effects as it gears imagination towards the potential of the unexpected event.

Scenario analyses thereby also *create temporal order* through assigning degrees of probability and through gauging and producing striated kinds of futurity. The solution to the problem of virtuality, that is, radical openness of the future, hereby lies in producing the future as a layered realm. This can involve the normative designation of 'best' or 'worst' cases or the assessment of the likelihood of specific scenarios after they have been designed. While the problematisation of virtuality that arguably forms the basic appeal of scenario analysis as a technology of government relies on the radical openness of the future, this openness is qualified through scenario analysis and hence gives an impression of manageability. As the scenario technique heavily rejects any claims to prediction, it is bound to the present and to creating a presence of futurity that helps us in the here and now.

This impression of manageability leads to the most basic point through which scenario analyses and imaginative techniques can be understood as actualising virtual potentials. The basic problem to which these practices respond is that of the potential of the unexpected event. Technologies of risk base their legitimisation of action on different degrees of probability of the occurrence of a specific event and hence different degrees of expectation. In contrast, a problematisation of the virtual stresses that there is an omnipresent, ontologically given potential that things take us by surprise. Scenario analysis then represents a *capacity to act in a situ*ation where action seems futile and baseless. While this point is related to the argument that scenario analysis actualises virtual potentials by giving them a specific form, it is more basically tied to the quality of scenario analyses and other imaginative practices as acts themselves. As Makridakis and Taleb argue with regards to low levels of predictability, "[t]he critical question is, how can we plan, formulate strategies, invest our savings, manage our health, and generally make future oriented decisions, accepting that there are no crystal balls?" (Makridakis/Taleb, 2009: 840). On an abstract level the scenario itself, as a performance of mapping virtuality, as the showcasing of a capacity to act is *itself* the solution. Scenarios "authorize knowledge claims in the absence of actual events" (Lakoff, 2008: 419). Instead of submitting to the potential of the unexpected future, technologies of government can appropriate this quality and reinterpret it as a call to action that works in the absence of evidence. By producing memories of the future these practices work on their own legitimisation without having to bear the burden of proof of actual events.

As technologies of government, imaginative practices, and particularly scenario analyses represent an attempt to translate the governmental rationalities bound to subjunctive bordering into routinised practices. As they start from the premise that the future is an open virtuality, they necessarily operate on a vague terrain. Mapping virtual potentials of futurity can never put forward certainties. Instead, it is a way of coping with uncertainty and of demonstrating a capacity to act in the face of it. Importantly, the exercise of mapping is never innocently descriptive and instead a productive practice. Mapping the future, while premised on the undecidability of the virtual, also actualises the virtual by giving it a concrete form in the present, narrating concrete stories and creating memories of the future. The temporality of the imaginative practices described above is at its basis durational – allowing for overlapping futures that, by virtue of their virtual potential, inform present actions. However, it also allows for striating time, insinuating varying degrees of temporal order, ranging from chronotic continuity to kairotic emergency. Notwithstanding the concrete contents of future narratives, scenarios also translate the claims of the rationality of subjunctive bordering by translating its form and reproducing it as routinised practices, constantly reiterating the potential of the unexpected and the need to prepare. Through scenarios, imagination is disciplined to accept and to reproduce this virtual potential of the unexpected event. They never step too far away from the vagueness of the future which their ontology subscribes to. As such, I argued that they can be understood as abstract calls to *act*, opening up a more *situational* strategic register than risk analysis. Exploring this call further is the aim of the next section, which looks at its concrete forms, by investigating preparedness, contingency planning, and intuition as various embodiments of a *presence* of the future.

4.3 The future's presence as *situation* and the affective register of response "there's nothing like the real thing [...] you just don't know what the reality is till it happens" (Frontex, 2015b: 53)

Scenarios represent a form of actualising the future. Their production of events and the proliferation of potential futures through future narratives create a presence of the future, marking an "impact of futurity on the solidity of the present" (Massumi, 2015: 117). This last section takes a closer look at this *presence*, drawing mainly on the recommendations produced through scenario analyses and articulated in panel discussions. This perspective then sheds light on two patterns. Firstly, the presence of the future seems to produce a decidedly *situational* orientation, a focus on the *real thing as it happens* (Frontex, 2015b: 53; EBCGD, 2014b). The potential of the unexpected event produces the emergent *situation* as the relevant terrain for intervention, thus questioning the anticipatory appearance insinuated by a futures perspective (cf. de Goede, 2008: 159). Secondly, the body of the border guard becomes a means to grasp this emergent situation, an observation continuing the emphasis on the human element already present in the notion of imagination. *Affect*, as the bodily capacity to be affected by and to be responsive to the situation emerges as a central register in order to confront situations in a timely manner.

4.3.1 The situational outlook of preparedness and contingency planning

The virtual terrain sketched through the problematisation of the unexpected event comprises a realm of potential incidents challenging the border. While this virtuality is filled with a multiplicity of overlapping potentials it also implies their potential actualisation as specific moments in which the border is challenged in concrete ways. Actualisation constricts the realm of

potential futures to the unfolding of one specific future, which may turn out to be a bad surprise. In turn, this implies a need to *act* if such a situation occurs. Mapping scenarios insinuates an ability to "play around with the indeterminacy of the virtual future" (Lundborg, 2016a: 263), capitalises on overlapping temporalities and capturing their becoming. In contrast, the actualisation of virtual potential, that is, the confirmation of the kairotic hypothesis in a specific situation leaves no room to negotiate. Instead, it builds on the organisational and individual capacity to recall preparedness exercises and contingency plans and to *act* accordingly. The various recommendations by scenario analyses and panellists translate the potential for the actualisation of the virtual into a situational focus. Recommendations mainly evolve around the themes of preparedness, resilience, contingency planning and an internalisation of an abstract dispositions to expect the unexpected.

Scenarios stress the need to "improve the readiness" as well as the ability "to tackle whenever and what type of event will come up" (EBCGD, 2013b). Here, the image of the actualisation of the future remains explicitly unqualified in temporal terms – the unexpected event could happen in every moment. This lack of clarity is also present in substantial terms. Instead of sketching concrete forms of actualisation the need consists in "getting ready for whatever might happen" (EBCGD, 2013b). What is at stake in a specific actualisation is thus less the specific *kind* of thing that happens. Here, recommendations mirror the vagueness already present in wild card scenarios. The important aspect is rather *that* something happens, which in turn triggers a need to act in a situation. The only certainty that this potentially menacing situation holds is "change itself, and that this change is in the process of displacing feelings of safety, and disrupting the entrenched notions of what is normal" (Lundborg, 2012: 18). To confront this potential disruptiveness, two strategies can be identified, preparedness and contingency planning.

Basing its raison d'être on the potential occurrence of an unexpected challenge to the border, preparedness aims at pre-structuring actualisations by changing the conditions in which they would occur (Lakoff, 2007; Krasmann/Hentschel, 2019). Preparedness shares a close affinity with questions of the vulnerability of borders. Vulnerability already forms a part of risk analysis and refers to "the capacity of a system to mitigate a threat" (Frontex, 2012c: 27). As a senior EU bureaucrat of DG Home explains,

"[w]e cannot only look at the planning without looking into the robustness of the [border management] system in itself [...] Because by definition, if the basic system is not robust, it will not survive, let's say, an external shock" (EBCGD, 2014b).

Preparedness and vulnerability are premised on a virtual multiplicity of potential futures as they stress that the challenge is "not about predicting and more about being prepared to various futures. Plural." (EBCGD 2014b). However, preparedness tends to focus on an abstract worst

case, such as the 'external shock', always already assuming its emergence: "Although the probability and severity of a given event are not known, one must behave as if the worst-case scenario were going to occur" (Lakoff, 2007: 254). It thus paints a picture of a "generic crisis situation" (Lakoff, 2008: 411) which is "unpredictable but potentially catastrophic" (Lakoff, 2008: 420). Preparedness thus aims at resilience and at pre-structuring a system so that actualisation itself turns out less shocking (Lakoff, 2007: 253f):

"planning cannot be based on specific predictions of trends or 'likely' developments. With current knowledge, the future will always be unpredictable. Planners therefore need to aim at resilience; being able to respond to any imaginable threat" (Frontex, 2011: foreword)

While preparedness thus still focuses more on the virtual potential of the unexpected event, it also actualises this potential through actions to improve the border system's robustness. In the case of preparedness, the situation is central as that which potentially occurs and for which preparation is due. Unable to sense emergence, preparedness answers to the challenge of "responding to the emergent, long before it has actualized in a form we can locate or even recognize" (Cooper, 2006: 117). Preparedness can be understood as a call to action, based on the virtual potential of threat. Due to its virtual character, threat cannot be calculated in terms of probability. Hence, its imaginability suffices to prescribe a present orientation towards strengthening borders. Its situational outlook is focussed on pre-structuring, as "no mass of information will help us pin-point the precise when, where and how of the coming havoc" (Cooper, 2006: 119). Characterised by spatio-temporal and contentual uncertainty, preparedness actualises virtuality through pointing to the necessity of maintaining "an ongoing capability to respond" (Lakoff, 2007: 253).

Albeit closely tied to preparedness, contingency planning is less concerned with prestructuring and instead focusses more thoroughly on *acting* in a situation in which the virtual actualises. It functions according to a "governmental aspiration of inhabiting and acting within and upon the event" (Walters, 2016: 808). It thus qualifies the generic character of the potential crisis, although less by adding concrete elements and instead by exploring the intensities of the situation. A contingency plan is a "coordinated set of steps to be taken in case of an emergency or disaster at the border in order to help the government quickly recover from serious incidents at minimum cost and disruption" and as such it "is an integral part of managing potential or actual risk" (European Commission, 2010: 10). Basically, it aims at clarifying "the division of responsibilities in case of imminent threats to national security or public health or in extreme situations" (European Commission, 2010: 57).

Contingency planning stresses a combination of velocity and emergence as well as a need for adaptation and flexibility as critical elements of the situation. It expresses an

orientation towards "response capacity" (Frontex, 2015b: 47), summarised as a need for "more and faster" (Frontex, 2015b: 47) action and represents an answer to the potential actualisation of the unexpected event as it actualises. A senior Frontex official, charged with managing Frontex' pooled resources, argues that flexibility and adaptability become crucial as "the situation on the borders itself is so fluid" (Frontex, 2015b: 49), thereby mirroring a central earlier recommendation that stresses the need to develop the capacity "to deal with rapid change, create mechanisms for identifying emerging events and adapting and coping with them" (Frontex, 2011: 91). Similarly, the 2015 ARA stresses a "constantly evolving location and scale of the threats witnessed", requiring border authorities to confront "moments of emergency" (Frontex, 2015a: 55). Strategically, the ontological features of threat – emergence, velocity, adaptability – are translated into virtues of bordering itself (Massumi, 2015: 14).

"Emergency flows [...] for which contingency planning is necessary" (Frontex, 2014a: 24) come as surprises due to the fact that "early warnings at land BCPs [border crossing points] are rarely available" (Frontex, 2014a: 24). In contrast to air borders, land borders are less of a controlled environment and therefore facilitate the emergence of threatening potentials. Regularly, the theme of emergence is combined with that of velocity, reflected in the above examples as accentuations of 'rapid change' or a need for 'faster' response. The situations in question "tend to develop fast" (Frontex, 2015b: 47) and express imminent danger. Contingency planning is constructed as an answer to the rapid emergence of an unexpected event or development, premised on the disastrous potentials sketched by wild card scenarios:

"Wildcards, in particular, may require the creation of contingency plans in case of events which may have low probability, but potentially very high impact on the border security, and may occur very rapidly" (Frontex, 2011: 91).

It also expresses an attempt to find a compromise between the bureaucratic requirement of standardised procedures on the one hand and the need of adapting to a given emergency situation on the other:

"Given the prevailing uncertainty, the key message is that there has to be enough flexibility in the EU border control system and sufficient reserves in terms of resources, to allow Frontex and MS border guard services to react appropriately in rapidly changing circumstances" (Frontex, 2011: 91).

Contingency planning therefore seeks to guide situational action. An example translating this abstract need into concrete practices is the establishment of Standard Operating Procedures (SOPs; cf. Fig. 6) as well as information flow charts (cf. Fig. 7).⁸ SOPs help to speak chronotic

⁸ One actual contingency plan (*'Regional Migrant Healthcare Contingency Plan for Sicily*'; Frontex, 2017b) was available for analysis. However, it is considered a best practice example which should be used in order to arrive at "a harmonised approach" (Frontex, 2017b: 5)

order to the kairotic situation (Lakoff, 2007: 254). The emergency situation as such is a "spacetime of imminent danger in which action is demanded" (Adey/Anderson, 2012: 107). Its actualisation thus produces "an exceptional time, [...] requiring exceptional actions (although those actions may have been practised so that they have become habitual)" (Adey/Anderson, 2012:107). Striating this exceptionality, SOPs provide temporal order by establishing a common way of seeing and interpreting the situation and by orchestrating standardised responses. The exemplary SOP can hence be read as a guideline for both, structuring action in a timely manner - establishing which steps should be taken in which sequence - and of producing different kinds of groups according to different rationalities (legal, humanitarian, health-related). Such procedures therefore bring the unexpected event into a form of "manageable segments" (Aradau/van Munster, 2012: 236; cf. Kaufmann, 2016: 102). Manageability relies upon the ability to be flexible and to become attuned to the situation as it unfolds. The aim of contingency plans is therefore to "improve agility and flexible response capability" (Frontex, 2017a: 15), thereby arriving at a "decreased response time to changing operational needs as expressed by the Member States" (Frontex, 2017a: 23). Again, response has to happen fast, thus underlining the chronopolitical stakes invested in contingency planning. What is needed is a "timely, effective and coordinated approach to managing migratory flows in critical contexts" (Frontex, 2017b: 10). SOPs aim at "quickly closing down the 'disruptive' time of the emergency event and restoring the linear historical time of standard political processes" (Zebrowski, 2019: 158).

Information flow charts (cf. Fig. 7) on the other hand identify relevant authorities before emergency situations occur, ensuring smooth communication in the situation. Establishing sound communication is essential in order to produce situational awareness (Krasmann/Hentschel, 2019; Walters, 2016), that is a shared sense of what the situation that contingency planning seeks to order *is*, a common way of seeing things. Communication is crucial for "maintaining order in a time of emergency" (Lakoff, 2007: 254). As this communication again depends on the proliferation of specific sets of pictures, data and other means of structuring its impressions so as to make it governable, it becomes evident "that the 'situation itself' is never given but is rather an artefact" (Krasmann/Hentschel, 2019: 183). In fact, it could be argued that following a specific communication scheme produces the situation as much as it responds to it.

Preparedness and contingency planning seek to provide answers to the unknowability of the future. They do so by reinterpreting the future in situational terms. If we cannot expect to foresee and predict future developments, we need to be prepared and we need to act. The *situation* is premised as being disruptive (building on wild card scenarios), representing the most menacing variant of the actualisation of the future.

IT HOTSPOTS - Standard Operating Procedures

- B.3. Operational sequences/procedures
- The following operational sequences must be followed at all hotspot facilities:
- I SAR rescues and landings;
- II health screening and the timely identification of vulnerable groups (also by using information acquired on boats after rescue operations);
- III transport to hotspot facilities, security checks depending on the local situation, issuance of information in paper form regarding the current immigration and asylum regulations of international organisations and the ways in which incoming individuals can manifest their desire to request international protection, as well as clear indications regarding the competent authorities able to receive said requests;
- IV pre-identification (ID photo and ID bracelets, if used by SAR operators on boats after rescue operations);

It should be noted that pre-identification activities, including the attribution of nationality, are by no means adequate in determining the attribution of a definitive legal status and do not impede an individual's ability to exercise the right to ask for international protection, including at a later point in time. Referral mechanisms for individuals expressing a desire to request international protection must be made available at all times (e.g. the manifestation of desire in terms of forensics or an Immigration Office referral, including via the proactive role of all individuals working at the hotspot facility).

- V the provision of information regarding the current immigration and asylum legislation of international organisations (the rights and duties associated with entry to a region and the right to request international protection or access to a relocation procedure in a language understandable to the individual);
- VI identification, photo-documentation and database checks (AFIS/EURODAC and other police databases¹); intervention of authority in charge of carrying out investigative activities, which must be carried out across the board during all phases of this procedure, as a matter of priority, as well as a debriefing by Frontex;
- VII reception in hotspot accommodation and medical examination facilities (taking into account the results of the medical triage performed at the disembarkation point);
- VIII provision of structured information on procedures for requesting international protection and relocation;
- IX debriefing by Frontex (activity carried out during various stages in the procedure);
- X release from hotspot facility;

Transfer to a secondary reception facility (regional hub, temporary facility etc.)

Figure 6: "IT HOTSPOTS - Standard Operating Procedures" (Frontex, 2017b: 20)

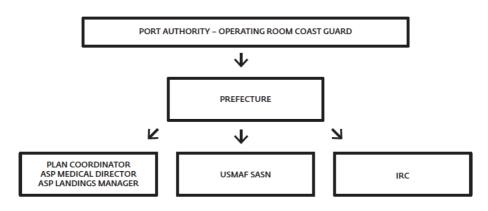


Figure 7: "Information flow" (Frontex, 2017b: 23)

Two different yet unexclusive approaches, preparedness and contingency planning aim at both, pre-structuration and situational structuration so as to order emergence. Actualising virtual potentials, the presence of the future produced through these strategies leads to a professional disposition to see the border as being under siege (if only virtually) and of expecting the unexpected and being prepared to act. Both practices can be characterised as pre-emptive, as they translate a virtual, future cause – the mere potential of the unexpected, disruptive event – into actions in the present (Massumi, 2015: 15). However, the temporal terrain at which they aim and which they produce is not so much the future but the emergent situation. While scenario analyses aim to map a virtual terrain, preparedness and contingency planning hence focus on action on and within concrete situational actualisations. Articulations of futurity that stress unpredictability hence become crucial drivers for refocussing on the here and now as well as on sovereign action in the present. Both, preparedness and contingency planning embody a dialectic movement between stasis and fluidity. On the one hand, they stress a need to be prepared to constantly emerging threats and the fluidity of the situation (Walters, 2016: 807). They also highlight a need for flexibility in bordering practices, to be able to adapt to changes. On the other hand, they aim at structuring the situation and to subject it to a regime of bringing a potentially exceptional time into manageable segments.

4.3.2 The body's capacity to confront the actualisation of the virtual

Preparedness strategies and contingency planning emphasise the situation as a terrain of governmental intervention. This terrain is structured by emergence and velocity, as well as an instantaneous intensity that calls for action. Paralleling these rather institutional calls for action, another (if less prominent) discursive strand finds the nexus of virtuality and actuality in the embodied cognition of individual border guards. These recommendations try to make productive use of border guards' embodied capabilities of sensing emerging situations via intuition. To be sure, this is nothing new as "[g]overning security has always operated through the senses" (Krasmann/Hentschel, 2019: 186). However, taking the individual border guard into account allows us to grasp how the dispositif of virtuality inscribes itself not only into the institutional level but also into mundane everyday practices and individual experience.

For the individual border guard, adaptive behaviour becomes crucial in order to confront emerging situations. In addition to institutional preparedness, "mental preparedness" is crucial to enable "adaptive behaviour" (Frontex, 2011: 94). This mental preparedness is promoted through education about complexity and futures thinking (Frontex, 2011: 94). In abstract terms, the threat of the "other side" (EBCGD, 2014b) of the border stems from "the emergent nature of networks on the adversary side", making it mandatory for bordering to "look into the emergent nature, as a complex adaptive system" (EBCGD, 2014b). While this again highlights the

emergent 'nature' of threat and thus its characteristically virtual form, it is also translated into a need for bordering itself, to be adaptive, notably also at the individual border guard level. Following Massumi we can see how bordering "incites its adversary to take emergent form", while it is itself striving "to become as proteiform as its ever-emergent adversary can be" (Massumi, 2015: 15). Adaptability is then a central capacity to confront contingencies "as they happen" (EBCGD, 2014b), thus emphasising the situational need of the momentary actualisation of contingencies.

The need for adaptability comes with individual, bodily experiences, as highlighted in Frontex publications. For instance, discussing night time monitoring of a sea stretch between Greece and Turkey, "[t]he greatest challenge [...] is staying alert throughout the long nights" (Frontex, 2015b: 51). Monitoring borders through night vision equipment requires "high levels of concentration" and "can be an exhausting task" that also includes "periods of boredom" in which staying alert is hard but necessary (Frontex, 2015b: 53). As the adversary side could become a challenge at any moment, bodies need to be fit to act and to maintain awareness. When discussing the potential asset of using various technological capabilities to use in order to mitigate contingencies, one panellist argues that

"the training and the expertise, and probably most importantly, the inherent knowledge and understanding, the intuition that border guards have developed over years of experience maybe a sixth sense, if you want to call it that, but that tacit knowledge and understanding is critical" (EBCGD, 2014b).

As technology might fail, the ability to take recourse to individual, human capacities of border guards is essential (EBCGD, 2014b).

Tapping the capacities of the border guard "who has the boots on the ground, who is at the border crossing, who knows the localised intuition, this sixth sense" (EBCGD, 2014b) represents an opportunity to confront the networked threat emerging on the 'other side'. It becomes vital to gain hold of this embodied knowledge of border guards, their awareness of situations and of local conditions and their capacity to *act* on the basis of non-codified, intuitive and experience-based forms of knowledge (Thrift, 2004: 596). While explicitly referencing the intuitive character of this form of knowledge, it is important to note that this is by no means a form of esoteric or irrational reasoning. Instead, intuition is rationalised through scientific, psychological studies, constructing it as a valuable knowledgeable practice to confront the virtual. As one panellist argues

"I think that the twelfth seconds of intuition, which today we do understand scientifically, we understand intuition, if anyone is unfamiliar, I highly recommend going back to the studies done by Gary Klein on understanding intuition; it is crucial to both

understand that and through education of border guards, trying to see what of it could be permeated" (EBCGD, 2014b).

Following the panel's recommendation, we can find a knowledge diffusion that makes its way from scientific psychological studies through the US military and its adaption to the 'war on terror' to the European borders. Klein's approach to decision-making as well as its strategic application in the army context shed light on the kind of thing that intuition is (Klein et al. 1986; Klein, 1993; Ross et al. 2004). Following its genealogy, intuitive decision making at the border highlights the reflexivity between situations and decisions, the subsequent strategic assets of appropriating intuition as well as the affective register through which intuition works.

Klein's work focusses on developing a 'naturalistic' model of decision-making. In contrast to 'analytic decision making', which relies "on concurrent generation and evaluation of options" (Klein, 1993: 145), the 'recognition primed decision' (RPD) model suggests that experienced decision makers can abbreviate the analytic process and instead "generate a workable option as the first to consider" (Klein, 1993: 140). Stressing the reflexivity between situations and decisions, the "search for an optimal choice" and the consideration of multiple options present in analytic decision making may take "long enough to lose control of the operation altogether" (Klein, 1993: 139). In contrast, the RPD model is oriented towards a satisfying rather than an optimal solution "finding actions that [are] workable, timely, and cost effective." (Klein, 1993: 139). Slower, analytical decision making may lead to situations getting "out of control" before practitioners "could make any decisions" (Klein, 1993: 140). Hence, there is no neutral standpoint from which to assess a situation and rather, assessment itself has productive effects on how a situation develops. Rapid emergence necessitates rapid decision-making. In turn, intuition holds the promise of acting fast and satisfyingly vis-à-vis emergent contingencies at the border.

Initially, these findings are not very spectacular and rather merely "a description of what people do" (Klein, 1993: 146). However, the RPD model gains a proscriptive purpose. Turning RPD into an applied strategic asset, we can find a naturalisation of a threatening action-environment as well as a decisionist orientation that follows a problematic instrumental rationality of mirroring velocity in decisions. Pointing to the strategic value of the RPD model, an article published by Klein and his colleagues in the US Army Journal '*Military Review*' (Ross et al. 2004) proposes a "practical application of the RPD model" (termed recognition planning model [RPM]). Rejecting the traditional, analytic military decision making procedure (MDMP) that relies on producing three courses of action with regards to a situation, the RPD-based model "is consistent with natural practices and enables an increase in tempo without losing efficacy" (Ross et al. 2004: 7). A corrective to the "cumbersome" (Ross et al. 2004: 6) MDMP procedure, it promises a 20 percent increase in planning tempo (Ross et al. 2004: 6). The RPM does not

"prevent or hamper an experienced planner from using the ability to quickly assess a situation and come up with a plausible COA [course of action]" (Ross et al. 2004: 7), thereby capitalising upon "time-constraints" (Ross et al. 2004: 8).

As a context, the global war on terror is crucial to understand the high "face validity" (Ross et al. 2004: 8) of the RPM. In another army publication reflecting on the possibility of applying RPM, the authors argue that the RPM will help "to develop plans and orders rapidly in the current operating environment: the Global War On Terrorism" (Bushey/Forsyth, 2006: 10). Thereby a connection is drawn between an ontological assumption of a continuously emerging, dangerous environment, expressed in "rapidly changing situations" (Bushey/Forsyth, 2006: 10) and the RPM as an effective and especially fast response. As the war on terror requires "rapid planning to produce agility and flexibility" (Bushey/Forsyth, 2006: 10), RPM enables the armed forces to "act faster than the enemy" (Bushey/Forsyth, 2006: 10). Using the intuition of planners that builds on experience therefore helps to take rapid decisions, which is urgently required in an environment characterised by "speed [...] and, in particular [...] acceleration" (Zebrowski, 2016: 109; emph. in orig.). The velocity of emergence needs to be mirrored in the actions confronting it as slow decision-making strategies "can leave the decision maker unable to react quickly and effectively" (Klein, 1993: 146). This background, again, is subjunctive. If no decision were taken or if they were taken too slow, the consequences could be fatal. In the past, there could have been a future threat (Massumi, 2015: 190). So fast action is required to capture the "becoming-dangerous" (Zebrowski, 2016: 109) of the situation. In turn, threat's virtual omnipresence creates "a potential licence for prejudicial perception" (Butler, 2004: 77) as Judith Butler argues. Experience – which the RPD model heavily relies upon - is never neutral but primed by education and training. If anything is potentially a danger, proliferating with increasing velocity and if what is at stake is nothing less than sovereignty, action needs to be primed towards repression, and it has to happen fast: "As sensorial data is fed into expert knowledge, exercises do not distinguish between different events, their background and causes but focus on immediate and urgent action." (Aradau/van Munster, 2011: 105).

Lastly, intuition can be read as an attempt of sensing the virtual and the becoming-dangerous of a border situation. This relies on the entanglement of the situation and the border guard. Intuition eventually lies in-between subject and object and instead capitalises upon their mutual affective resonances. The scope of RPD comprises 'naturalistic settings' which are "characterized by time constraints, uncertainty, high stress, and unclear shifting goals" (Schmitt/Klein, 1999: n.p.) and thus emergence. Naturally, such an environment creates an orientation towards intuitive decision-making, as a mode of "counter-emergence" (Cooper, 2006: 116). This intensity is called upon when Frontex stresses that "[a]n EU border guard has on average just 12 seconds to decide whether the traveller in front of them is legitimate or not, or to assess if their documents are genuine" (Frontex, 2015b: 15), and that "[w]hen the security and economic well-being of Europe's millions depend as much as they do on those 12 seconds to decide, nothing less will do" (Frontex, 2012b: 15). Eventually, the intensities of the situation push a decision-maker towards adopting a recognitional strategy, as it "is more likely when the decision maker is experienced, when time pressure is greater, and when conditions are less stable" (Klein, 1993: 46). Quoting again from a study with fireground commanders, Klein describes how they

"argued that they were not 'making choices,' 'considering alternatives,' or 'assessing probabilities.' They saw themselves as acting and reacting on the basis of prior experience; they were generating, monitoring, and modifying plans to meet the needs of the situations" (Klein, 1993: 139).

This logic is affective as it builds on the capacity of bodies to sense and respond to the intensities of a situation, thereby pointing to the inseparability of situation and decision maker and the productive effects of their encounter (de Vries, 2013: 144). Rather than conscious decisions, what is at stake under time pressure is the "autonomy of affect" (Massumi, 2002) which works "without being consciously invoked" (Kaufmann, 2016: 104). It is particularly the "moment of encounter" (Kaufmann 2016: 103) in which a particularly intense situation inscribes itself on the embodied cognition of a decision maker: "[t]he reality of the situation is its affective quality" (Massumi, 2005: 37; cf. Massumi, 2015: 190). As Klein highlights, there is no sense of 'making choices' or deploying a considerate examination of alternatives. Rather, there is no conscious way of acting in the situation, as "[n]o amount of reflection will solve the puzzle [...] of fitting the pieces together in a way that logically resolves the problem of what action to take" (Massumi, 2015: 118). Instead, under a logic of intuition, "[t]he solution must be performed" and it "must be enactive" (Massumi, 2015: 118). Intuition here becomes a surrogate for decision. As the intensity of the situation can only be resolved through intuitive action it is reminiscent of the self-referential logic of sovereignty - intuition is "improvised survival" (Massumi, 2015: 122). The situation – in its potentially disruptive incarnation – produces a disposition for pure activity. Intuition is thus born in experience which becomes habitual "in the sense that the more practiced it is, the more automatic and unreflective its exercise" (Massumi, 2015: 120) – hence also the recurrent accents connecting intuition, experience and training (Frontex, 2015b; EBCGD, 2014b; Frontex, 2011). Intuition emerges as a bodily, affective capacity to sense and to confront the virtual, as experience covers a broad range of potentials: "a body is confronted by a clammer of cues, each sparking a potential action-environment" (Massumi, 2015: 121). If the intensity of the situation – the action-environment – appears to be strong enough, this is a cue triggering immediate action. Rationalised via scientific references, this action is effective,

if not optimal. While it is instrumental to confront the rapidly emerging situation, it is problematic since it has a tendency to abolish the deliberative necessities of democratic politics and action. The unexpected event inscribes itself on the individual body of the border guard and its capacity to be affected by situations:

"Preparedness in that sense is itself conjectural, based on connections of clues, details and signs – which are often experienced through the situated and embodied knowledge of each subject. [...] the human body is disciplined to be watchful, aware, attentive and suspicious, and to attune the senses to the unexpected" (Aradau/van Munster, 2011: 106f).

As a last point here, it is important to reiterate the implications of 'memories of the future' for this kind of decision making. Without the prior establishment of the unexpected event or the bad surprise through the kairotic hypothesis in the problematisation of risk analysis' take on the future, without its proliferation and translation into and its perpetuation as a technology of government through scenarios and the wild card accompanying them, recognition-primed decision making would be extraordinary unfit to confront the problem of the unexpected event. It would only see what was already there, thus leaving no room for the emergence of novelty. However, as this potential is repeatedly iterated through an underlying rationality of subjunctive bordering and technologies that translate this rationality, intuition is primed "for an unpredictable future" (Massumi, 2015: 109). It is primed for recognising nonrecognition.

Having explored the rationalities and technologies informing a dispositif of virtuality of the EUropean border, this last section tried to shed light on some concrete forms that the dispositif produces. Starting from the question what kind of actualities emerge from the viewpoint of a virtual co-presence of futures (as sketched through scenarios and other imaginative practices), I argued that the situation and situational action that is radically tied to the present evolves as a governmental terrain of intervention. It is thus less the future's futurity and rather the presence it produces that is strategically drawn from a dispositif of virtuality. This ranges from pre-structuring situations via preparedness over producing and striating the situation via contingency planning to appropriating the intuitive capacities of the border guard's body in order to grapple with the problem of virtuality. Although mirroring the vagueness described by a rationality of unexpected events and technologies of mapping the future, the situation is qualified by the intensive qualities of (bodily felt) emergence and velocity. In a context of ontological uncertainty and rapid change, sovereign decisions may be turned into intuitive acts that are not made or taken as the momentarily actualisation of a norm but rather forced on the decision maker as an affective interaction with the situation itself. Its origin lies neither within the petty sovereign, decision-making subject of the border guard (Butler, 2004: 66), nor in an objective situation

but – unsatisfyingly for approaches heralding divisions of subjects and objects as well as approaches dividing body and mind – in an affective *in-between*. In its attempt to capture the virtual, sovereignty thus recodes itself, capitalising upon the vagueness of virtuality and the inbetweenness of affect and thereby blurring the question of who decides – and subsequently who is responsible. Instead, it romanticises 'intuition' and 'sixth senses' and rationalises them scientifically. In bordering practices, it seems, government knows what a body is capable of (de Vries, 2013: 144), and it is willing to bring this ability into line with its aims.

5. Conclusion

"It is a mistake to think that the painter works on a white surface [...] everything he has in his head or around him is already in the canvas, more or less virtually, more or less actually, before he begins his work" (Deleuze, 2003: 86).

Neither Francis Bacon, the Irish painter whose work Deleuze describes in the quote above, nor the European Union in its bordering practices work on a plainly *actual* layer of reality. Instead, it is crucial to gain an understanding of virtuality, the realm of potentials, and its presence in present actions. In this thesis I argued that it is possible to observe the increasing importance of virtuality in EU bordering practices. Just as the painter does not work on a blank canvas, the European border is already overlain by a virtual layer of future imaginations. Within the discourses and practices of EU border security professionals, it is possible to tentatively observe this virtual layer in subjunctive bordering practices. Subjunctive bordering relies on a problematisation of risk analysis' take on futurity. Instead of viewing futurity as a repetition of the past, subjunctive bordering builds its appeal on imaginability. The problem of risk analysis – its inability to grasp the future's potential to turn out differently and to actualise as a catastrophic event and a bad surprise – is confronted through practices that try to grasp the future's virtual qualities through imagination.

My point of departure consisted in considering three important vectors for a (critical) analytics of the border, consisting in a focus on problematisations, biopolitics and in-betweenness. Adding a temporal dimension to these vectors by introducing *chronos* and *kairos*, as well as an understanding of the co-presence of different temporal layers through *duration*, I argued that we need to understand bordering practices in terms of their references to and usage of these different registers. The potential of *kairos* – and thus the virtual potential of an as of yet un-knowable threat – evades the calculative regime of risk analysis at the border. In contrast, subjunctive forms of bordering both problematise these practices through a *kairotic hypothesis* and appropriate the virtual co-presence of different futures. As subjunctive bordering aims at the future, it adds a sense of *temporal* limit to the border. The border is no longer merely confronted with enacting the limits of territory or the biopolitical limits of circulation. Adding a temporal view, and particularly looking at future constructions, the border is also confronted with the limits of knowledge. This problem is essential, since it poses a threat to sovereign survival. In turn, "[w]ithin this space 'at the limit" subjunctive practices become one of the "new technologies [...] deployed to create an imaginary cartography of the future" (Aradau et al. 2008: 150f). The limitation of knowledge implied by futurity is appropriated and turned into a productive governmental technology, multiplying future presences in the here and now.

Interpreting Bacon's creative act, Deleuze argues that he used accidental marks on the canvas to escape the nascent problem of cliché, of reproducing the shapes and motifs we have come to accept as normal. Chance becomes "inseparable from a possibility of utilization" (Deleuze, 2003: 94). Similarly, building on the empirical explorations of this thesis, I think it is possible to observe a utilisation of the seemingly open and creative capacity of imagination in the work of Frontex (as an important actor governing the European border regime) within a dispositif of virtuality.

The rationality informing this dispositif is based on a problematisation of futurity as understood via risk analysis. Countering the chronotic order promised through risk analysis and its repetitions of the past, a *kairotic hypothesis* maintains the potential of the unexpected event. It thus alludes to an ontological openness of futurity and an underlying uncertainty that cannot possibly be tamed. This problematisation points to a fundamental incompleteness of any take on futurity as well as to the co-presence of various futures. It assumes a virtual realm of mutually overlapping potential futures, thus involving a shift in the underlying biopolitical regime of truth. Instead of skimming normality from the (actualised) 'reality' purported by statistics and archival arrays of past events, subjunctive bordering introduces a regime of imaginability. It thus focuses on the virtual interzone, on that which could potentially happen.

Translating this rationality into routinised practices becomes challenging because it seems to counter the basic assumption of the rationality it seeks to translate. If uncertainty is ontologically given, then how could it be circumvented? The answer consists in various imaginative practice such as scenario analyses. The border becomes subject to a subjunctive rather than a probabilistic form of reasoning – the question being *what is imaginable* instead of *what is likely* – and therefore *imagination* as a practice becomes the principal driver of technologies of government. These technologies build on a durational temporality and produce co-present futures as events and as memories of the future. These memories stress an abstract sense of uncertainty. Although concrete occurrences are produced, in the form of future narratives, these are all presented as instances that *could* happen. Unwilling and unable to provide certainties,

these governmental technologies hence reproduce the virtual potential of disruptive future events. At the same time, they themselves can be seen as actualisations, as they give a form to futurity and speak order to it. Their basic appeal thus lies in performing a capacity to act vis-àvis uncertainty.

Looking at the various recommendations produced through these subjunctive bordering practices, it becomes visible how futurity reaches well into the present. I hence looked at preparedness, contingency planning and the utilisation of intuition as specific forms that the presence of the future takes. Preparedness and contingency planning aim at pre-structuring situations and at striating them as they actualise respectively. On the other hand, the body of the border guard is used in order to grasp virtuality through 'intuition', which emerges as an affective capacity to sense the intensity of situations, for example their velocity and urgency. As it relies on memories of the future that maintain the potential of wild card events, appropriating these affective capacities of the human body gears them towards expecting the unexpected event. Intuitive *action* thus becomes the abstract answer to the abstract problem posed by a virtual future.

Theoretically, this thesis observes a change in the biopolitical regime of power at play in governing the European border. Controlling the border reaches for the future not only through risk analysis but importantly also through imagination and creative attempts to map virtuality. However, biopolitics and sovereignty should not be sharply contraposed. Rather, and particularly at the border (which remains a crucial arm in the symbolic struggle for sovereignty and political potency [Bigo, 2002: 67]) they are enacted as overlapping topologies of power in which exclusion remains a crucial element although relying on the people-making productive forces of biopolitics (Collier, 2009). To this we may add the future-making powers of a dispositif of virtuality that creates memories of the future and hence informs both sovereignty and biopolitics as orders of imaginability (Aradau et al. 2008: 152). We thus need to understand the virtual as both a problem and a chance for sovereignty to recode itself through acting in the face of the malicious potentials of futurity.

There are certainly serious limits to this thesis. A first one concerns the empirical material used, which was limited to publicly available publications and videos. While the main focus in this thesis laid on developing the theoretical argument and illustrating it empirically, my analysis of the dispositif of virtuality could be substantiated through a more thorough empirical analysis. This could for example be done through a genealogical account that traces the emergence of the unknown as a rationale of government (cf. for example Aradau/van Munster, 2011; Ewald, 2002). Walters (2016: 810) reminds us of the importance to "be careful not to project a degree of effectiveness and capability" onto bordering practices, which may end up reifying their power. This underlines a need for empirical analyses to investigate the failures of subjunctive bordering as "practices of power are commonly frustrated, escaped and clearly uncertain" (Adey/Anderson, 2012: 104; cf. Kaufmann, 2016: 103), thus opening up potentials for resistance. Moreover, the readily available empirical material I relied on cannot replace more in-depth accounts of speaking with border security professionals engaging in scenario analyses, not least to grasp their more informal future imaginations. Ethnographically observing scenario exercises as they are regularly carried out by Frontex could also provide interesting additional findings. Theoretically, especially the importance of the situation as well as the appropriation of affective registers in order to confront it could be particularly interesting to pursue (cf. for example Krasmann/Hentschel, 2019; Kaufmann, 2016).

A second limit concerns the idea of virtuality, which notoriously escapes attempts to pinpoint it as a concept, hence making it a challenging analytical term. The decision to include the virtual into this thesis admittedly lacks any ultimate justification. It is that, an ontological decision and an experiment to view the world in light of it. Even if it is not possible to make the virtual visible in substantial terms – an attempt which would be grounded in a misunderstanding of the ontology of becoming underlying virtuality – I think this thesis showed how problematisations of the future can be viewed as operating on a virtual terrain. In line with other authors (cf. Dillon, 2003; Lundborg, 2012, 2016a; Debrix/Barder, 2012), I found the idea of the virtual particularly useful to reconsider and adapt some of the insights of the 'original' Foucauldian take on biopolitics. In particular, this concerns questions of temporality. While the importance of the future is already present in the original writings on biopolitics, adding Deleuze's ideas (who throughout his life was an admirer and recipient of Foucault's work) substantiate this account of temporality theoretically.

A third objection may concern the question of the novelty of my argument. One could argue that this is merely a transfer of the theorisation of resilience to the border as a new case. My answer here is twofold. It is certainly true that the resilience literature makes a highly topical contribution to the question of the potential of the future event. However, on the one hand, resilience is empirically not a very prominent term in the context of the EU border. In fact, the concept is only marginally referred to in two of the analysed documents (Frontex, 2011, 2015a). On the other hand, while resilience engages with questions of temporality, there remains a "necessity to further explore and theorize these complex links between resilience temporalities" (Dunn Cavelty et al. 2015: 7). The use of Deleuze could be a fruitful theoretical avenue to do so.

As a fourth and last point, I want to address the important question of criticality. Is this thesis critical and if yes, how? I would argue that it is critical due to the attempt it makes to open up bordering practices and to see how a virtual future – and virtual threats from the future – exert a force on the present that makes it susceptible to claims to *more* security and *more*

control. This is for example evident in the emerging need to be prepared. We can easily see how this translates into a self-reinforcing logic. It is precisely the *virtual* character of this logic, the fact that the cause of that which is prepared for lies in the future, which makes it hardly falsifiable. It is however not critical in the sense that it aims at providing alternatives or in the sense that it follows a pre-established political programme. This is the case because, within its criticality, it is fundamentally insecure, as "the foundation of critique is its foundation-less-ness [...] - is insecurity" (Burgess, 2019: 108). My critique therefore confines itself, based on a fundamental discomfort with the exclusionary workings of sovereignty (and biopolitics), to investigating that which has come to be accepted as normal, be it the border as such or certain practices of bordering that already work on a routinised basis, and to open these normalities up for investigation. As the sheer virtual potential of movements is imagined and read through the potential bad surprise, the future becomes unequally distributed. It lends itself to border security professionals to legitimise claims to control. In the end, besides discussions on the actual and the virtual, it should not be forgotten that the border is, above all, a very *real* obstacle to many of those seeking to cross it. The dramatic events at the Turkish-EUropean border in March 2020 are a reminder of that. As long as the border subsists, it keeps producing the absurdity captured by Bertolt Brecht during exile:

"The passport is the noblest part of a human being. Nor does it come into the world in such a simple way as a human being. A human being can come about anywhere, in the most irresponsible manner and with no proper reason at all, but not a passport. That's why a passport will always be honoured, if it's a good one, whereas a person can be as good as you like, and still no one takes any notice" (Brecht, 2019: 13).

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